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**THE ATTITUDES AND BEHAVIOUR OF HOTEL CHEFS AND CHEF
LECTURERS REGARDING THE USE OF CONVENIENCE
INGREDIENTS**

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A thesis submitted in partial fulfilment of the
requirements of the University of West London
for the Degree of Master of Philosophy

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Abstract

This study examined and compared the attitudes and behaviours of chefs towards convenience ingredients and their use in four and five star hotel restaurant kitchens and catering college kitchen classrooms. Chefs are in a unique position to influence food ingredient purchases, and their selection of ingredients and the rationale for such choices is used in this thesis to perform a comparative analysis and gain understanding of any attitudinal and behavioural relationships that may affect the acceptance, sales, use and development of convenience ingredients, and to fill a gap in understanding in an under-researched sector of food service within the hospitality industry.

Data was collected using the mixed methods (triangulation) of quantitative survey and qualitative (semi-structured) interviews from a sample of 253 senior hotel chefs and college chef lecturers throughout the United Kingdom. Key findings were that convenience ingredients are used extensively, and that their acceptability is enhanced by functional factors such as food safety, waste control and cost and labour, however 30% of hotel chefs were resistant to their use and both sets of respondents believed that convenience ingredients are a cause of de-skilling within the professional kitchen. A new definition of convenience ingredients was developed and accepted by over 60% of both sets of respondents and over 80% of both sets agreed that there is a need for on-line e-Learning about ingredient use within recipe development with a strong focus on healthier food and special diets (allergens).

These findings provide academics, practitioners, educationalists, food manufacturers and suppliers with new data and an opportunity to further enhance learning, innovation, development and the sales of an ingredient phenomenon that is current practice but still divides opinion within the foodservice sector of the food industry.

Acknowledgements and declaration

As is customary I would like to acknowledge and credit those who have contributed towards making this research possible. The original idea for the research was my own, following my success in gaining a scholarship, for further academic study through my BA Honours degree in International Culinary Arts and Gastronomy at the London School of Tourism, Hospitality and Leisure, Thames Valley (now University of West London). I should also like to thank Michael Herriott, an old friend and army colleague, from Napier University Edinburgh, who advised me that an MPhil Research Master's degree was an alternative option to a Masters in Hospitality.

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The written work is all my own but has received critical commentary from my supervisors Doctor Sarah Cullen, Professor Sibel Roller and Dr Andy Gatley, who undertook the latter stages of my supervision and provided critical and very

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Ethics and governance

The research was conducted within the guidelines and standards of the UWL Research Degree Committee in May 2011 and conforms to the UWL Research Ethics Code of Practice (available from:

http://www.uwl.ac.uk/research/Research_strategy_and_codes_of_practice.jsp

Conflict of interest

To the best of my knowledge there was no conflict of interest involved in the conduct of this research.

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Abbreviations

ACF – Academie Culinaire Francaise

BTEC - Widely recognised work-related qualifications suitable for a wide range of ages and abilities.

F&B – Food and Beverage

MCA – Master of Culinary Arts awarded by the Royal Academy of Culinary Arts

MIH – Member Institute of Hospitality

MSG – Monosodium glutamate

NPD – New product development

NVQs – National Vocational Qualifications

QSR – Quick service restaurants

SPSS –Statistical Package for the Social Sciences, now also known as IBM SPSS Statistics

WACS – World Association of Chef Societies

Glossary of Terms

Academy of Culinary Arts (now Royal RACA) - The Royal Academy of Culinary Arts is Britain's leading association of professional chefs, managers and suppliers; uniting like-minded professionals in the pursuit of a stronger future for the hospitality industry.

Association Culinaire Francaise – A French culinary association promoting French culinary arts in the UK, organising events and competitions, with members all over the United Kingdom and the world

Blachan - A pungent, dark-brown dried shrimp paste is an essential ingredient in South East Asian cooking, particularly in Thailand, and used in very small amounts in soups and curries.

British Culinary Federation - is a World Association of Chefs' Societies (WACS) and was founded on a partnership between the Chefs and Cooks Circle and the Midlands Association of Chefs.

Browning – Shortened term for 'gravy browning' a dark brown liquid made from caramel, molasses and spices and used to provide gravies, stews and sauces with appetising colour.

Brevet de Maitrise de Cuisinier – French advanced diploma in professional cookery

Chaîne des Rôtisseurs - The International Association of Gastronomy bringing together enthusiasts who share the same values of quality, fine dining, the encouragement of the culinary arts and the pleasures of the table. Its distinctive mission is to bring together amateurs and professionals, from all over the world, whether hoteliers, restaurateurs, executive chefs or sommeliers, in the appreciation of fine cuisine.

Chef de Partie – French culinary term for a chef in charge of a particular area of production

Commis Chef – French culinary term for a basic chef in larger kitchens who works under 'chef *de parties*' learning their respective station's responsibilities and operations

Convenience ingredients – Food ingredients pre-prepared, generally but not exclusively by food manufacturers, to minimise the level of preparation and cooking required in the kitchen.

Cooking Alcohol and Spirits with Salt – Cooking wines with a reduced alcohol content but added salt

Craft Guild of Chefs - Established in 1965 as a guild of the Cookery and Food Association, the Craft Guild of Chefs has developed into the leading Chefs' Association in the UK and has many members worldwide

Crisp Film - Crisp Film® is a modified high amylose corn starch, which forms clear, flexible films without requiring hydration or cooking and thickens products into a crispy glaze at room temperature.

Epicurean World Master Chef Society - An international chef organisation whose main objectives are the promotion of the art and science of fine cuisine, creativity and production, education through demonstrations, product endorsements, and promoting the interests and recognition of Master Chefs and others within the culinary profession.

Euro Toque – European chef association

Federation of Chefs Scotland – A not-for-profit chef organisation set up to promote the interests of Scottish chefs

Foodservice – Generic term for businesses in the food, drink and hospitality industry, preparing, delivering, serving or dispensing foodstuffs

Fruit Pastes – Manufactured convenience ingredients that are pastes or compounds from a range of fresh fruits such as strawberries, blackberries, cherries and raspberries, in tubs and with the basic addition of boiling water, stock syrup (sugar and water), milks and other liquids, which can be used as a base for mousses, cheesecakes and sauces

Guar Gum – Food thickener from the endosperm of guar beans

Master Chefs of Great Britain - Formed in 1982 with the aim of providing a forum for the exchange of culinary ideas and to further the profession through training and guidance for young chefs.

Panel of Chefs Ireland – The professional chefs association of Ireland

Paste Marinades – Convenience ingredients manufactured and placed in sealed tubs with the addition of fresh ingredients such as water, coconut milk and tomato puree; can mimic a vast range of sauce bases such as Indian, Thai, North African, herbal and many others. Can also be added directly to soups, sauces and marinades to add flavour

Powdered Gelling Agents – A generic name for modern manufactured natural thickeners such as guar bean gum, locust bean gum, xanthan gum, agar (algae) and carrageenan (seaweed), much used by food manufacturers and practitioners of molecular gastronomy

Quick Service Restaurants (QSR) – Specific type of restaurants characterised by their fast food cuisine and minimal table service

Roux Granules – Convenience ingredients manufactured with flour and oil to mimic the classical fresh roux of flour and butter/fat

Scratch – The term used for cooking with fresh ingredients: cooking from scratch

Sous Chef – A French culinary term means ‘the under-chef of the kitchen’ and second-in-command reporting to the head chef or ‘Chef de Cuisine’ in a French kitchen.

Toque – French term for a tall chef’s hat

Typologies – A classification according to type

Umami – A Japanese term for one of the five basic tastes, along with sweet, sour, bitter and salt. Monosodium glutamate is manufactured and used as an ingredient to enhance umami flavour through salt forms

Xanthan gum - Commonly used as a food thickening agent (in salad dressings, for example) and by followers of molecular gastronomy

Vegemite - A dark brown Australian food paste made from leftover brewers' yeast extract

Welsh Culinary Association - A partnership of professional chefs and caterers whose mission is to develop and raise the culinary profile of Wales, its establishments and those working within them - in all three regions - North Wales, Mid Wales and South Wales.

Chapter 1 Introduction

1.1 Background

One of the main challenges facing craft-oriented chefs in the contemporary professional kitchen is that of the rising influence of convenience ingredients, prepared foods, new technologically innovative equipment and the pressure to embrace and adopt such methods of convenience in a variety of areas. This change can include computerised kitchen ovens that can both roast and steam, or a combination allied to the same oven which also has the ability to electronically store recipes and eliminate normally manual requirements such as probing the core temperature of beef and alerting a chef when it is cooked to requirement. Other areas of convenience may include fully or partially prepared food such as vegetables, meats or even complete meals. All are designed to reduce cost, waste and labour (Robinson and Barron 2007, Cameron 2001). These forms of convenience are generally accepted and are in practice across many levels of catering from staff canteens to luxury hotels and Restaurants, and are readily supplied by dedicated catering equipment manufacturers and suppliers, catering butchers and catering fruit and vegetable suppliers. For example, as verbally advised by the food and beverage director of Gleneagles, a luxury hotel and spa in Scotland, the exact requirements for fresh ingredient oriented 'finished restaurant menu plate garnishes' and sub-contracting have been specified for a number of years to local suppliers. What is not so well known or acknowledged is the degree to which manufactured convenience ingredients are being used as an alternative, or in collaboration with fresh ingredients, to basic food preparations such as kitchen stocks, curry pastes, gravy, mayonnaise and dressings and how convenience ingredients are perceived by hotel chefs in four and five star hotel restaurant

kitchens, and chef lecturers in catering colleges who have a responsibility to educate, train and develop chefs in both traditional and contemporary catering.

Research into attitudes and behaviour towards the use of convenience methods for foods has generally been consumer-driven, such as that of Olsen *et al.* (2008) exploring the relationship between convenience and fish consumption, and in several other studies (Candel 2001; Jaeger and Meiselman 2004; Mahon *et al.* 2006; and Scholderer and Grunert; 2005). Candel (2001) suggested, in arguing for further research, that convenience might be culture-specific, meaning that levels of convenience orientation are being influenced by such variables as lifestyle, time, cost and consumption. What became clear was that a research gap existed within the area of convenience ingredients, and their use in the foodservice sector of the hospitality industry.

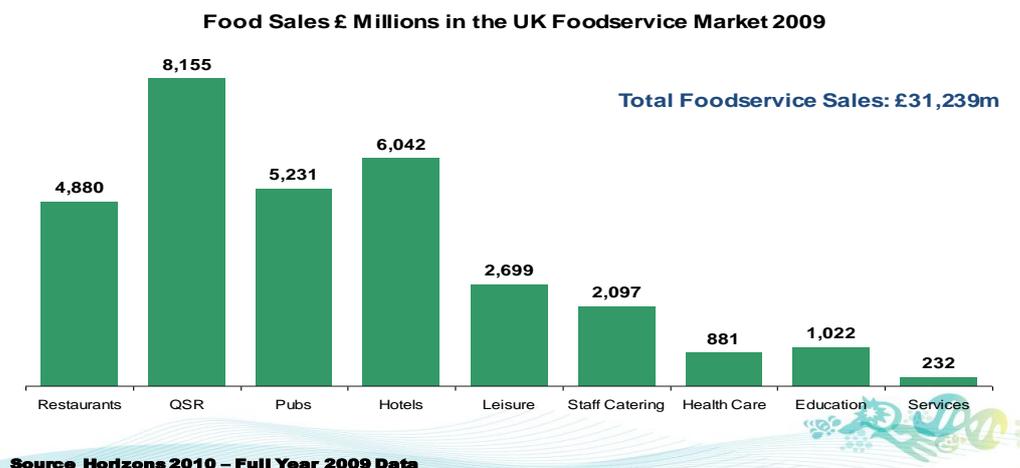
My own general work experience over a seven year period between 2003 to 2010, from within a large multi-national food development manufacturer, suggested that the attitudes of professional chefs in four and five star hotel restaurants and chef lecturers in catering colleges were resistant to modern day convenience ingredients, and such attitudes were not only detrimental to the successful sales and growth targets of the manufacturer for whom I worked, but may also have been contributing to a gap in the culinary educational knowledge and understanding of convenience ingredients. This was further endorsed by discussions with hotel chefs and chef lecturers within the foodservice sector who admitted to using such ingredients, but with reservations that included negative peer perception.

Candel's (2001) suggestion for further research and the lack of cross sectional studies into food-related areas, articulated by Jaeger and Meiselman (2004) and meaning a lack of consumer information from a particular population or subset of the population, provided the inspiration and impetus to undertake such research into the *attitudes and behaviours of hotel chefs and chef lecturers towards the use of convenience ingredients* in four and five star hotels and restaurants and catering colleges throughout the United Kingdom. What also became apparent in the early stages of the study was that there was very little research into the definition of convenience ingredients and that what had been undertaken was from a retail, consumer or general catering perspective.

1.1.1 Purpose of research

The UK foodservice sector has nine recognised segments with total food and beverage sales in 2009 valued at £31.2 billion in 260,000 catering outlets of varying size as indicated in Figure 1(Horizons 2010).

Figure 1.1 Food Sales £ Millions in the UK Foodservice Market 2009



Total meals served were 8,264 million. In terms of food sales Quick Service Restaurants (QSR) make the most sales, followed by hotels. This background sets

the scene for the importance of food in general and the financial opportunity for food manufacturing and food supply companies in the provision of convenience ingredients within the foodservice sector.

Current evidence suggests that research into convenience ingredients has been consumer led and restricted to looking at attitudes in relation to the use of fresh food such as farmed cod in England, Norway and Spain (Bjorklund 2008); genetically engineered tomatoes in the United States (Crowley et al. 2002); foods with functional claims (Bhaskaran and Hardley 2002); and genetically modified food in the United Kingdom (Spence and Townsend 2007). Other research, Riley (2005) and Sheely (2008) had a broader base, but still noted the purchase of pre-prepared food products, which could include complete dishes such as Indian curries and Italian lasagne, and the resulting loss of skills (de-skilling) without reference to the convenience ingredients that could be purchased as an alternative, and support re-skilling or a change in skills. Secondary research undertaken for the literature review suggests that because it is often high in fat, sugar, salt and additives convenience food is generally viewed as a catch-all for what is bad in food and is frequently linked by consumers to junk or fast food, as articulated in Millstone and Lang (2008); Atkins and Bowler (2007) and Gillespie (2006). What appears to be missing is research into attitudes and behaviours towards convenience ingredients as used, or not, by professional chefs.

The purpose of this research was therefore to specifically define and separate the concept of 'convenience ingredients' as used within the foodservice sector from consumer perceptions of convenience, and evaluate the positive and negative

influences on hotel chefs and chef lecturer attitudes (Spence and Townsend 2007 and Sparks *et al.*1992).

1.1.2 Rationale

Professional chefs are in a unique position to influence the food ingredients chosen by catering operators through their direct involvement in the purchasing, preparation, cooking and service of finished, recipe dishes which in turn may affect the skill set of those same chefs (Cameron *et.al* 1999, Robinson and Barron 2007). The rationale for selecting two sets of respondents, senior hotel chefs, and college chef lecturers, for this research was that apart from their senior roles within hotel kitchens and college kitchen classrooms, and their unique position from which to influence food ingredient purchases, was to provide a comparative analysis and understanding of any relationship between the two groups of respondents that may affect the sales, use and acceptance of those ingredients. That rationale also included a perception, held by food manufacturers and their sales and marketing teams, that apart from four and five star hotel chefs being more aligned to classical culinary kitchen practices handed down from generation to generation, catering college lecturers, many having worked in hotel restaurants, were also more inclined towards high end four and five star restaurant classic training and development from scratch (fresh ingredients) rather than that of current practice in the wider industry which includes a wide and varied use of convenience ingredients.

Several other questions contributed to the selection of two sets of respondents; the technical specifications/functionalities and working environments/conditions that made convenience ingredients and their use more acceptable, and whether there were any significant differences between the two groups of chefs in their attitude

towards using convenience ingredients for professional kitchen practice and kitchen classroom training and development. What additional educational and professional development, if any, was required to raise culinary and general awareness of convenience ingredients and their use, could some of this be undertaken by food manufacturers and suppliers, and was there a definition that could be constructed and used to better define the attributes of modern manufactured convenience ingredients and their use that both sets of respondents would find acceptable and could be used generically within the foodservice sector?

Candel (2001:17) suggested that the saving of time and effort at various stages of the food consumption process could be defined as:

“...domain specific and the degree to which a consumer is inclined to save time and money in regard to meal preparation and clearing up...and that the most time and energy consuming process is that of the preparation stage...future research should test possible differences in convenience orientation and the meaning of convenience.”

This study, in line with Candel's advice on future research, will provide a platform to clarify ideas about and concepts of the hotel chef and the chef educator's attitudes and behaviour towards professional use of convenience ingredients within their hotel and teaching kitchen environments that would otherwise not have been forthcoming. The research will also examine kitchen cultures that may determine attitudes of acceptance, rejection and use, and, whilst not a key focus, will help to clarify and assist in making and examining arguments and decisions about innovation in convenience ingredients, marketing and sales, from a food manufacturer's perspective, and the attitudes of the chef operators in the hotel and college kitchens of the foodservice industry to purchasing.

1.1.3 Scope

The research focused on manufactured convenience ingredients and their use, acceptability and definition by senior hotel chefs in four and five star hotel environments and chef lecturers in catering colleges throughout the United Kingdom. The research includes senior chefs in four and five star and luxury hotel restaurant kitchens, who can vary by title and position from head chef to executive chef, to Michelin starred chefs who have varying degrees of autonomy and are responsible for all the operational kitchen practices agreed by the hotel management, such as food purchasing decisions, managing and meeting food costs, managing kitchen labour budgets and gross profit (GP). Culinary directors who have overall responsibility for the operational continuity of all chefs within hotel groups are also included. Luxury hotels and Michelin starred restaurants within hotels and their chefs were also included. Contract catering chefs also included as a number of contract businesses manage luxury hotels. Chef lecturers are included and by definition, but not exclusively, are professional chefs or lecturers with a chef background who move from the operational kitchen to the kitchen classroom. Their roles vary from college to college but ideally they have some experience and background in the teaching or training of professional cookery, food and beverages and will teach students kitchen practice and front of house service. A breakdown of the titles, training and development backgrounds of hotel chefs and lecturer chefs from the findings of the first section of this research can be viewed in Questions, 3, 4 and 5 of the tables of comparison in Appendix 5, and in the 'Others' list of Appendices 8a and 8d.

Convenience ingredients defined and generally included in this research are those used in the general kitchens, larders and pastry environments of hotel restaurant

kitchens and college kitchen classrooms and include stock granules and powders, compound food pastes such as curry pastes and fruit pastes, emulsions such as mayonnaise and salad dressings and non-butter spreads, which are manufactured by food manufacturers to replicate scratch (fresh and un-prepared) ingredients to be used as an alternative to or as a complement to fresh ingredients. This could include bouillon pastes, for example, manufactured both as an alternative to fresh bouillon made from bones and aromatic herbs, or as an additional flavour enhancer in the fresh bouillon. Convenience foods including milled flour, fresh bread cooking oil, fresh, chilled and frozen foods such as pre-prepared meat, vegetables and potatoes, canned vegetables meats and sauces are excluded.

The study involves six chapters: Chapter One provides the introduction, scope, rationale, background information and the research questions, aims and objectives; Chapter Two focuses on a review of literature and available data related to convenience ingredients and their use by professional chefs and chef lecturers in their respective catering and educational catering environments; Chapter Three covers the methodology and evaluates in detail the chosen methods of data collection, subsequent methods of analysis, reliability, validity and related topics; Chapter Four presents the findings and analysis; and Chapter Five is the discussion. Chapter Six provides conclusions and recommendations. A study clearly defining and separating the use of convenience ingredients and that of convenience food and prepared food products will allow further research that will test possible attitudinal and cultural differences towards the acceptability of convenience ingredients, and an appropriate definition [of convenience ingredients] within the

operational and educational kitchens of hotel (professional) chefs and chef lecturers (Candel 2001).

1.2 Research aim

In order to maximise the efficacy and efficiency of the research the aim was to:

“Establish core elements of the study through background research and comparative analysis into how attitudes and behaviour towards the use of convenience ingredients may vary between chefs in hotel restaurant kitchens and chef lecturers in catering college kitchen classrooms.”

Fine (1996) cited in Robinson and Barron (2007: 918) observed “*the use of convenience foods*” as being a principal factor linked to de-skilling. By linking convenience foods and de-skilling this observation provided an additional aim to review and debate de-skilling within the working environment of the professional chef and chef lecturer, and to understand and analyse any links between convenience ingredients and de-skilling. It was also important to understand whether the negative effect and general understanding of de-skilling, attributed to a number of factors including new equipment technology, culinary innovations linked to convenience, standardisation and recession, could be counterbalanced with a positive definition of re-skilling via the use of modern professional convenience ingredients (Cameron 2001; Robinson and Barron 2007 and Lashley 2009).

1.3 Research questions

Occupational and cultural attitudes towards the use of modern professional convenience ingredients in the operational and educational [development] environments of the hotel restaurant chef and catering college chef lecturer were examined and issues were studied, so as to enable the formulation of a clear set of research questions. As a result of this pre-inquiry analysis four principal research questions were addressed:

- a) How can contemporary convenience ingredients best be defined and is there a relationship between definition and chef type?
- b) Are there types of convenience ingredients that are more acceptable and is acceptability more related to one set of respondents than the other?
- c) What factors affect a chef's attitudes and use of convenience ingredients?
- d) Are convenience ingredients educationally accepted as being supportive of trends such as re-skilling, reducing food cost and food waste, supporting sustainability and recipes that are lower in calories, salt and fat?

The research questions within the questionnaires were carefully framed in a structure that reflected each of McNeil's axioms of sound methodology: "*reliability, validity and representativeness and generalisability*" (McNeil 1990: 14-16).

Chapter 2 Literature Review

2.1 Introduction

Initial research has indicated a wide range of generally consumer based interpretations of the term convenience, with limited and almost non-existent reference to convenience ingredients as used in foodservice. In searching the EBSCO HOST search engine only three research papers were cited and two were not food related. Given the close relationship between chef and consumer it was important to review all papers that appeared to have links, however tenuously, in line with the research and the research questions posed. The greatest reviewing task was validation or “*separating fact from bias*” an important aim of critical scholarship (Barzun and Graff, 1992:132). Sapsford and Jupp (2006:118) advise that validation requires authors claims to be “*measured or characterised and that interpretations do follow from them.*” Some of the literature reviewed, such as Harrison (1979) and Pepper (1980), is over thirty years old, but in relation to the research was still viewed as relevant.

2.2 Kitchen culture and the use of convenience ingredients

To further understand attitudes and behaviours towards convenience use it was important to understand the background, culture and identity from which professional chefs and chef lecturers operate. A number of studies have been undertaken into the importance of culture in general, for example Wright *et al.* (2001), Venkatesh (1995), and Craig and Douglas (2000). Kitchen work is collaborative by nature and requires various degrees of team work, and status is also an area of importance that suggests the type of work undertaken by chefs has a degree of worth in which their personal identity is invested (Fine 1996).

Culture and identity in general can be viewed within the prism of a group as opposed

to being singular concepts, with the implication of culture as communal, in that a bringing together and sharing of philosophies, ideologies, values, assumptions, beliefs and expectations will also bring together the culture and identity of the hotel chef and college lecturer background. Wright *et al.* (2001) suggest that tastes in food betray social and cultural origins and part of this research uses that view to determine whether those social and cultural contexts affected the attitudes of hotel chefs and chef lecturers.

2.2.1 Occupational and organisational culture and convenience

In a paper researching the occupational and organisational culture of chefs in hotels Cameron *et al.* (1999) suggested that craft-based culture (occupational) was more likely to be fixed, occasionally adversarial and less adaptive than organisational (management) culture, and concluded that the concepts of time and change may be the key differentials between those of organisation and occupation. In discussing adversarial conflict between these two cultures Cameron *et al.* (1999: 231) suggested that:

“Chefs in high standard hotels might find themselves in the dilemma of reconciling peer approved standards with the commercial demands made by the employing organisation.”

Cameron *et al.* (1999: 231) further advised that to avoid such conflict at a cultural level would require: *“a degree of mutual equivalence”*, which would mean, for example, that both management and the chef would be required to have *“a shared perception”* of the high standards they shared in food. Cameron *et al* further suggested that whatever their status outside a hotel, chefs normally commanded a measure of prestige within and further suggested that prestige and culture could be seen as separate concepts, with low status culture being seen as equally valid as that of high status culture. These concepts can be seen as directly related to the use

of convenience in professional kitchens in as much as a chef may have regrets in using foods and ingredients that can be seen to be diluting their sense of prestige and undermining the status enjoyed in that specific organisation.

2.2.2 De-skilling and re-skilling in the professional kitchen

Cameron *et al.* (1999); Cameron (2001); Robinson and Barron (2006) Pratten and O'Leary (2007) and Lashley (2009) have all contributed to research on the development of chef skills in the United Kingdom. Robinson and Barron (2006) suggest that the use of convenience foods is a mechanism for de-skilling in the professional kitchen, which undoubtedly includes convenience ingredients, financial restructuring and the evolving and adaption of technology. De-skilling can be experienced by chefs in four and five star hotels as well as in smaller hotels and can be defined as the standardisation of cooking techniques through centralisation and a lowering of the values and skills of cooking as commercial and organisational pressures conflict with traditional occupational peer-approved standards, and can lead to a reduction of chefs in kitchens (Cameron *et al.* 1999).

Re-skilling in the kitchen, sometimes known as up-skilling, is an approach to training and development that embraces new technologies in both equipment and food preparation in order to achieve similar or better outcomes, and is encouraged, particularly in times of recession, when marketing and economic arguments confront kitchen values and tradition. Re-skilling does not necessarily lead to more chef positions being created but may ease the work load of those working within a de-skilled environment. Within four and five star hotel environments, re-skilling may be seen by chefs and management as a challenge to chef values and tradition (Cameron *et al.* 1999, Lashley 2009). Foskett and Ceserani (2007:352) in reflecting

on future developments suggested that for food and beverage managers:

“The biggest challenge in the modern assembly kitchen, luxury hotels and restaurants, will be to convince tradition orientated chefs that the time has come to adopt new, economical ways of preparing food and further suggesting the chef and manager needs a better understanding as to how and why to switch over from traditional labour-intensive food preparation with more time spent on suitable ingredients and components, menu and recipe development.”

Foskett and Ceserani (2007) appear to be suggesting a degree of re-skilling for which industry and training providers have a responsibility and that current practice is reflected in college curriculums. However Lashley (2009) suggests, via anecdotal evidence, that re-skilling is becoming evident throughout the hospitality, tourism and leisure industry in response to customer resistance to too much standardisation.

2.3 Definition of convenience ingredients

Olsen *et al.* (2006), in referring to works by Candel (2001) and Scholderer and Grunert (2005) suggested that convenience in relation to food could be related to different stages of the consumption process, including planning, acquisition, purchasing, preparation and cooking, and had a role of differing importance dependent on different situational contexts. This research suggests that convenience in general is linked to conveniently pre-prepared food products, however, as opposed to ingredients, and defines convenience foods in a number of ways such as:

- a) Fully or partially prepared food in which significant preparation, time, culinary skills or energy inputs have been transferred from the domestic kitchen to the food industry (Buckley *et al.* 2005:7).
- b) The degree to which a consumer is inclined to save time and money in regard to meal preparation (Candel 2001:17).
- c) Foods which are stored at an advanced stage of preparation in order to

save time, skill, labour and equipment (Pepper 1980:54).

d) Those foods that transfer time and activities of preparation from the household manager to the food processor, classified within three categories: basic, complex and manufactured convenience (Buckley *et al.* 2005:7).

From a catering point of view it has been suggested that food could be viewed as convenient when it not only saves time, labour, cost and skilled preparation, but also by reducing the amount of equipment required to prepare the food (Harrison 1979). In categorising levels of convenience within catering Pepper (1980:254) concurred with Harrison's definition and further defined fast-foods as:

“Foods which are conveniently stored rapidly, assembled or prepared and quickly served...”

Buckley *et al.* (2005) suggested that defining convenience could be viewed as a multi-dimensional construct and that boundaries of separation are not fixed. What is arguably missing from all these definitions of convenience is the relevance of convenience as an ingredient for contemporary recipe construction and management within the professional domain. The lack of both a definitive and contemporary understanding of convenience ingredients, from within the literature reviewed, provided a perfect opportunity at the earliest point of the research to construct a workable definition. For the purpose of this study the definition of a convenience ingredient was constructed as best reflecting culinary experience in foodservice catering and food development, and from the literature researched. The definition is:

“Ingredients that meet the culinary aspirations, needs and convenience of the professional chef at the right time and for the right occasion without compromising consistency and standards of the finished food product served to the customer.”

2.3.1 Food typologies

Food typologies are a well-established model for consumer food segmentation and used, for example, by Buckley *et al.* (2005) and Cullen and Kingston (2009). Buckley *et al.* (2005:3) suggested that the Food Related Lifestyle (FRL) typology grouped consumers towards food products from an attitudinal approach such as:

“Purchase, preparation and consumption including quality aspects such as health, freshness and taste with the objective to investigate the degree to which food related lifestyle segments are convenience-oriented.”

Buckley *et al.* (2005) further advised that the demand and drivers of consumer convenience and convenience food are relatively well documented and understood within a number of papers including Khan (2000); Mintel (2000); Furey *et al.* (2000) and Swoboda and Morschett (2001). This literature, whilst consumer oriented, was relevant to the nature of this research, particularly the references to and research on convenience oriented and less convenience oriented consumers, and was used as a basis from which to adapt questions and statements for inclusion within the survey instrument. The intention was to establish what types of ingredients could be attributed to hotel chef and chef lecturer convenience orientations of acceptability and non-acceptability.

Table 2.1 - Chef typology levels

	Skill level	Interest in Food	Interest in Business	Interest in Guest & Products	Interest in Convenience
Master Chefs	*****	*****	**	*	
Entrepreneurs	*	*	*****	*****	
Pragmatic Chefs	***	***	*****	***	
Adventurous Chefs	***	*****	****	**	
Restricted Cooks	*	**	**	*****	

Source: Adapted from UFS 2004

Table 2.1 is a typology segmentation table that contrasts the potential interest, relationships and attitudes of hotel chefs, from skill levels to food, guests and convenience-related interests, with potential star rating highlighted as a guide to potential purchasing motives and inter-business relationship levels within the operation of the hotel chef. This type of information is of interest in this research in order to understand how hotel chefs and chef lecturers view themselves as a typology and skill set and the opportunity this may provide to food suppliers and the manufacturers of convenience ingredients in particular, and food products in general, and is further discussed in the methodology in Section 3.5.2 and in the findings and discussion of Chapters Four and Five.

2.4 Attitudes and behaviour towards convenience ingredients

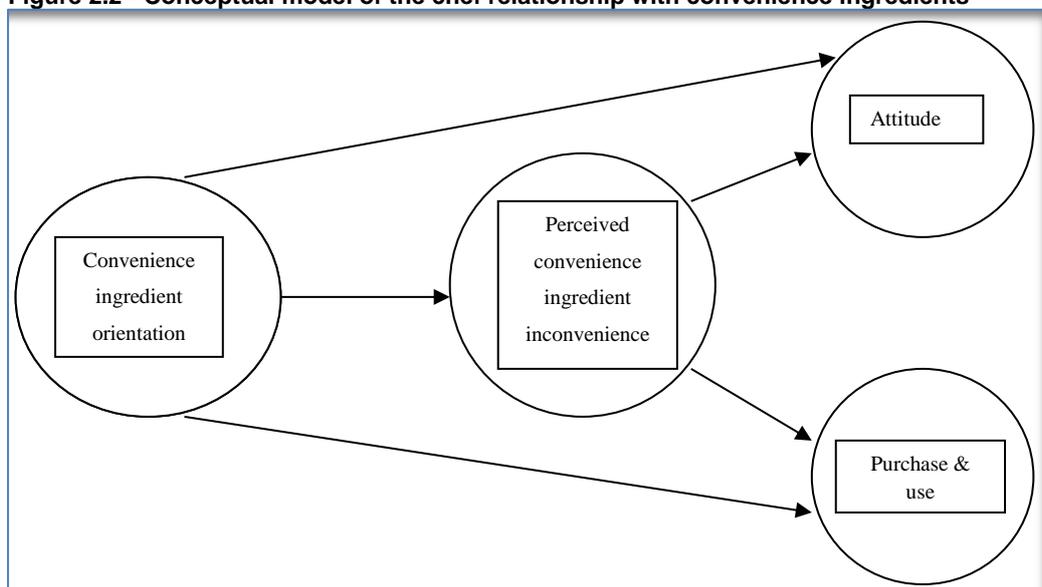
The majority of research papers on attitudes and behaviour were consumer related, such as Brunso *et al.* (2002), Hoffmann *et al.* (2005), Olsen *et al.* (2008), Spence and Townsend (2007), Bhaskaran and Hardley (2002), Dixon *et al.* (2006), Shepherd *et al.* (2005), Conner *et al.* (2003), Sparks *et al.* (2001) and Povey *et al.* (2000). The research uncovered a number of papers on chef related attitudes, behaviours and variability: Bjorklund *et al.* (2008); Middleton (2000) and Crowley *et al.* (2002).

2.4.1 Determinants of consumer behaviour related to convenience orientation

Convenience can be viewed as a three dimensional phenomenon that employs the use of time, physical and mental energy (Buckley *et al.* 2005). In a five country European cross-cultural study, Olsen *et al.* (2006) explored cultural differences in the meaning of convenience and the relationship between convenience, attitudes and fish consumption. The study highlighted that the role of convenience in explaining food attitudes and attitudes to food is not new and has been explored in (several

recent studies by Candel (2001), Jaeger and Meiselman (2004), Mahon *et al.* (2006), and Scholderer and Grunert (2005). Scholderer and Grunert looked at convenience orientation in relation to food consumption and choice, and their research found that attitudes towards convenience products were fully mediated between time budget and the use of convenience products (Scholderer and Grunert, 2005). This research resonates clearly with current practice within the food service sector and is relevant to this study. Olsen *et al.* (2006) further suggests, given various aspects of attitudes and behaviour in food consumption, a conceptual model for use in highlighting the relationship between Candel’s general meal convenience orientation and fish consumption (Candel 2001). The Olsen *et al.* (2006) model, Figure 2.2, was adapted by myself and can be distinguished from the chef convenience orientation to the two attitudinal constructs of perceived ingredient inconvenience and general attitudes towards the convenience ingredient and its use.

Figure 2.2 - Conceptual model of the chef relationship with convenience ingredients



Source: Adapted from Olsen *et al.* (2006).

The adapted model implies that a chef may have a specific orientation towards various types of ingredients with specific functionalities such as food safety

considerations, but that final purchase and use can be affected by perceived ingredient inconveniences such as cost or peer perceptions. Olsen *et al* (2006: 86) prepared a set of statements to reflect the influences such as “*I prefer meals that are quick to plan, buy (provide) prepare and cook.*” Olsen’s methods of question construction to reflect the influences clearly follows Candel’s model and style of questioning, was relevant to the research, and has been incorporated in the final quantitative questionnaire in Sections Ten and Eleven, and can be viewed in Appendices 2a and 2b.

2.4.2 Predicting behaviour – implicit and explicit attitudes

In researching implicit and explicit attitudes Spence and Townsend (2007) suggested that the valid prediction of behavioural attitudes is in line with physiological research and that the empirical and theoretical considerations are of great importance. Hoffmann *et al.* (2005) further suggest that the relationship between explicit and implicit attitudes is contentious and that there is a lack of correlation in the measures undertaken in many studies. Two main theoretical stances, dual and single, may explain the two attitudes. Wilson *et al.* (2000) described the dual attitude as a model that can be viewed from two or more levels by an individual and further suggest that any differences in or between attitudes could by way of explanation suggest constructs of separate individuality developed through differing procedures.

The attitude object suggested by Wilson *et al.* (2000) and the dual stance are of relevance to this research in order to understand how hotel chefs and college chef lecturers view convenience ingredients from two stances, such as that of their craft skills and the business requirement for food safety. This information was seen as a way to understand and measure the approaches of both the hotel chefs and chef

lecturers to convenience ingredients, and to further understand whether they had dual or a single attitude approach to convenience ingredients and their acceptance.

2.4.3 Attitudinal ambivalence

Ambivalence has been researched and defined in a variety of ways with several definitions referring to the co-existence of positive and negative evaluations of the attitude object (Sparks *et al.* 2001). Wegner (1995) cited by Sparks *et al.* (2001) saw ambivalence as:

“The extent to which one’s reactions to an attitude object are evaluatively mixed in that both positive (favourable) and negative (unfavourable) are included.”

In researching chef attitudes to contemporary convenience ingredients the interpretation and definition of ambivalence, as seen in one person, is a key indicator as to whether hotel chefs and chef lecturers hold opposite attitudes towards convenience, whilst simultaneously allowing the same attitude to convenience to co-exist in such a way that suggests there are both positive (favourable) and negative (unfavourable) elements that could be leveraged to the advantage of the chef (Sparks *et al.* 2001). In studying consumer attitudes and variability between two foods Sparks *et al.* (1992:57) suggest that:

“Attitudes to food consumption encompass a number of concerns such as: survival and health, through sensory pleasure and social exchange, to industrial profits and political pressure...”

The study suggests that chefs may be positively disposed towards particular foods for their sensory and social qualities whilst, for example, at the same time having negative attitudes towards them because of perceived food safety risks. Alternatively the suggestion is that food may be acceptable for nutritionally advantageous reasons regardless of taste but unacceptable on other grounds such as origin. Attitudinal

ambivalence was seen as a contributor towards convenience ingredient acceptability within this research.

2.5 Acceptability

Although widely used throughout the foodservice industry convenience ingredients present a conundrum to chefs in that they are seen as shortcuts that are contrary to the credibility of their culinary skills, culture, background and emotional beliefs which dictate that in the real world of catering all recipes should be cooked from scratch (Cameron 2001, Robinson and Barron 2007). This would mean, for example, that a stock should be prepared from bones, and aromatic vegetables and herbs and cooked for several hours rather than using a stock cube and boiling water. There was, however, no specific literature on convenience ingredients and their acceptability in relation to foodservice and hotel chefs and chef lecturers.

Sheely (2008) advised that the adoption of convenience ingredients by consumers could be influenced by demands such as declining cooking skills, value for money, moves toward healthier eating and a desire towards new experiences. Buckley et al. (2007) highlighted growing consumer discernibility regarding food consumed and the anticipation and insistence of quality. They further emphasised the study of quality from a consumer perspective and the importance of taste and freshness. The findings of both Sheely (2008) and Buckley *et al.* (2007), whilst consumer based, were seen as being relevant in that the consumer's desires could be related to those of chefs.

2.5.1 Authenticity of food ingredients

In reviewing the commercial and academic perspectives of authenticity and food experience Beer (2008) suggested that food was never consumed in isolation but

always in a context that could be viewed as complicated and difficult to analyse. In this research it was not the sum of the food that was being studied but rather the parts that make up that sum. The parts are of course the convenience ingredients and the sum is the finished dish which in itself can vary from complexity to simplicity. Craig (2002:42) suggests that *“what counts as a whole is not given by nature but depends to some extent on us and our purpose.”* Analysis of Craig’s quotation suggests that when choosing recipes from a purely fresh or partly fresh perspective then it is not the sum of the freshness that is the main consideration but an understanding of the parts that make up the sum which in turn could include a proportion of convenience ingredients. Craig’s statement is relevant to this research and analysis provides an opportunity to influence the construction of Questions 10 and 11 to test that theory.

2.5.2 Food choice – decision making

In investigating chef’s attitudes toward irradiated beef, Crowley *et al.* (2002) commented that chefs make significant decisions daily when selecting the ingredients and foods used in menu preparation. The comments on ingredients were non-specific and as such those comments can be attributed to both fresh and convenience ingredients.

2.5.3 Convenience ingredients and nutrition

‘Convenience’ and ‘healthy diets’ were recognised in the early to mid-1990s as two significant consumer foodservice trends (Shiu *et al.* 2004). They continue to be so, and a recent report placed healthier food as the leading foodservice trend (Allegra 2011). O’Mahony (2007) suggested that hotels have not exploited the healthy approach. O’Mahony’s research was important, not specifically in linking healthier food and diet to convenience ingredients but regarding the attitudes of hotel chefs

and the chef lecturers towards nutritional educational development linked to food ingredients in general, and convenience ingredients in particular. Healthier food and convenience ingredients are not, on initial observation, an acceptable combination. Research suggests that convenience is linked to food choices such as ready meals, fast foods, and burgers. Millstone and Lang (2007: 94) link these foods to convenience and define them as: *“requiring little or no preparation.”* They further state that fast foods and ready meals tend to have high levels of animal fat, and that through their subsequent popularity have become a contributor to obesity. When discussing ‘fast food’ Atkins and Bowler (2007:9) describe the McDonaldization of Society as a process that was adopted by food corporations in catering for:

“The lowest common denominator of mass consumer culture that in turn sell bland unchallenging products that transcend class and taste boundaries by their broad acceptability.”

Atkins and Bowlers research was looking to see whether there was broad acceptability of the use of convenience ingredients within the kitchen and management cultures of the hotel chef and college chef lecturer, whilst not specifically incorporating the criteria of the McDonaldization of Society.

2.5.4 Brand relationships

Bengtsson *et al.* (2010) discussed how brands evolve over time and their relationship with the consumer, whereas Foskett and Ceserani (2007) discussed the importance of food brand awareness and comparison from a market perspective. This research, with origins from within a brand based working environment, looked to establish whether brand quality, whilst not a main feature of the research, was seen as indicative of the overall orientation and purchasing attitudes of both the hotel chef and chef lecturer in relation to convenience ingredients, and to discover whether its

relationship with brand acceptance and consistency differed between the two sets of respondents.

2.6 Influence of education on convenience ingredients

Chef lecturers play a natural role not only in the provision of culinary skills development, but in enhancing and raising awareness of information that leads to improved hospitality education and training, including alternative techniques and methods, such as the use of convenience products, for both chefs and students, and in providing a greater understanding of the history and culture of food and drink (Santich 2004).

2.6.1 The chef educator

Pratten and O'Leary (2007: 76), in a research note on addressing "*the cause of chef shortages in the UK*", suggested college courses in the UK could offer more information about modern catering techniques and the use of technology and that catering colleges are "*failing in their duties*" to respond. Pratten and O'Leary are critical of the catering college educational system which they argue focuses on the hotel/restaurant trade and fails to train prospective chefs for the wider industry. They further suggest that although the use of pre-cooked and frozen meals is prevalent in many establishments, it does not feature highly within catering college curriculums and arguably should do. Pratten and O'Leary (2007: 22) suggested that chef educators do not spend much time dealing with pre-prepared foods and the reason given was that the chef educators felt that adapting to the use of pre-prepared foods would not be difficult, but that their role was:

"To prepare their student charges to enter the restaurant trade, for that was the normal destination, where the use of fresh ingredients was essential."

Pratten and O'Leary's suggestion was in line with the researcher's initial views and

experience from business meetings and related discussions, and was seen as an important part of the research in understanding whether there was any causal relationship between the resistance of four and five star hotel chefs to convenience ingredients, and their use.

2.6.2 Skills development

Taubman (1994) advised of the challenges for those responsible for the continuous professional development of chefs as they progress, and that they should look outwardly at the training, development, courses and curriculum aligned to the industry environment and current, if not necessarily best, practices. Lashley (2009) in an observation on skills development and training in the United Kingdom challenged the government-held assumption that employers are looking for advanced skills and further suggested that there are at least three different skill levels:

- a) *Key specialist jobs – managerial/executive head chefs*
- b) *Low skilled and poorly paid – part time/casual posts*
- c) *Technically skilled employees – equipped with specialist skills*

The inference is that training in colleges is geared to an elite set of skills not required by the bulk of the hospitality and catering industry, which further suggests that chef educators may be out of touch with current practice. In his opening lecture on college funding at the Professional Association of Chef Educationalists (PACE) conference at Whittlebury Hall, March 2010, to 350 college principals and lecturers and of which I was a delegate, Ashley Cheatham concluded that colleges and their curriculums should [within forthcoming financial restrictions] '*start to reflect current practice*'. Future research into the understanding of current practice may be necessary.

2.6.3 Constructivism and authenticity in education

Splitter (2008) highlights the drive for authenticity in education and cited the works of Fred Newmann and his colleagues (Newmann *et al.* 2001 and 1995) who argued for the re-construction of three key arms of training and acquisition of skills; curriculum, instruction (pedagogy) and assessment according to standards of authenticity, to be taught as closely connected to 'real world' activities. Newmann further suggests that the authenticity of school work, while necessary, may not be sufficient, and does not necessarily relate to the real world, and cites two conditions: (1) the construction of knowledge; and (2) disciplined enquiry. Splitter (2008: 139) suggested that constructivism is:

“Primarily, an epistemological and psychological thesis about how we learn, viz. by actively and self-consciously bringing our past experiences and understandings, which may or may not bear the status of knowledge, to bear in a collaborative exercise with other learners”, as we “process, interpret and negotiate the meaning of new information.”

Spitter's definition, linked to the use of convenience products in the professional kitchen, suggests culinary education, in relation to current practice, may lack authenticity and understanding, and has not kept pace with the real world.

2.6.4 Awareness of convenience ingredients in industry text books

Catering and hospitality text books relating to this research included This (2009), Foskett and Ceserani (2007), Hunter *et al.* (2008), and McGee (2004), covering both traditional and contemporary theoretical and practical skills from purchase to customer service, and reflecting all the other key food and beverage activities that interlink toward successful operations. These publications are aimed not only at food and hospitality students, both novices and mature, but also at mature chefs and catering operators for their own reference.

An introduction to the 11th edition of *The Theory of Catering* suggests that there is a growing need for well-trained operatives and managers to meet the challenges of an increasingly important industry, and that the book has been designed to meet the needs of those training or involved in the catering and hospitality industry (Foskett and Ceserani 2007). In general the publication, while admitting to not being a comprehensively written book, covers a wide spectrum of the catering and hospitality industry and makes frequent reference to convenience. Foskett and Ceserani (2007: 75) devote one hundred and four pages to food commodities and in the first page of Chapter 4 there is a recommendation for students to:

“...explore markets, get to know both fresh foods and all possible substitutes such as convenience or ready prepared and to make comparison between various brands of foods and between convenience and unprepared foods”

They also included a chapter, ‘Product Development and Manufacturing to Deliver Convenience in the Kitchen’, which I co-wrote as Head of Culinary Services at Unilever Foodsolutions to provide a food manufacturer view of convenience in the kitchen.

McGee (2004: 601), whilst not specifically aimed at catering students or for use with standard kitchen recipes, makes neither concession to convenience nor direct reference to convenience ingredients but does however make reference to *“Commercial meat extracts and sauce bases”* suggesting that: *“restaurant chefs and home cooks use them for their home-made soups.”*

What is interesting is the reference to natural starches used in the thickening of sauces, and whilst McGee does not provide a reference, they are, in their own right, convenience ingredients as used not only by both tradition-oriented and contemporary chefs but also by food manufacturers. McGee explains in depth and

detail the influence of starch thickened sauces on ingredients and also makes reference to manufactured modified starches used as alternatives to natural varieties. McGee's description is both informative and articulate and supplies the practitioner and student with a scientific and practical overview of traditional ingredients that are processed into powders and alternatives by food manufacturers, but fails to note that by undergoing this process they become convenience ingredients.

Herve This (2009: 50), in his book '*Building a Meal: From Molecular Gastronomy to Culinary Constructivism*', takes a different philosophical approach from McGee, which deconstructs and reconstructs culinary classics and suggests:

"We must change the way we cook and reduce the 80% energy wasted when we cook with gas and electric and change to induction stoves and microwave ovens and other energy efficient systems that are now available to chefs and caterers."

This's suggestion may provide an opportunity for a review of the contemporary development and education of chef, and their attitude to food preparation and cookery, in that culinary constructivism does not seek to destroy but looks at, analyses, deconstructs and reconstructs classic and traditionalist culinary approaches with a more modernist theme that includes the use of contemporary convenience [food] ingredients alongside fresh (This 2009). This (2009: 5) further suggests that tradition from an etymological perspective is "*that which is handed down*", and further distinguishes between the classic and traditionalist perspective by suggesting that "*If you are exposed at an early age to new methods then what is traditional for one seems innovative to others*" and further cautions against repeated use of "*doing something over and over again for the sake of tradition.*"

This's perspective can be understood and debated by "*tradition oriented*" hotel chefs and chef educators as practitioners of culinary educational development, whether within a professional hotel restaurant kitchen or college kitchen classroom, and can be further linked to the challenges raised in Section 2.2.2 relating to de-skilling and re-skilling, which may also be seen as a further challenge to the culinary values of "*tradition oriented*" hotel chefs and chef educators (Foskett & Ceserani 2007).

2.7 Summary of the literature review

In summarising the literature review the main areas that were covered included kitchen culture and convenience ingredients, the definition of convenience and related typologies, attitudes and behaviour towards convenience ingredients and their use and acceptability, and educators and their understanding of convenience ingredients.

The introduction highlighted an almost non-existent reference to convenience ingredients, with EBSCO Host only able to provide three papers, of which two were not about food. Kitchen culture and convenience ingredients were looked at with the kitchen (chef) and organisation (management) culture reviewed to understand whether there were any relationships between chef culture in luxury hotels and purchasing habits in relation to convenience in general, and whether these purchasing habits were affected by relationships with the organisation's management culture. This section also reviewed de-skilling to understand whether there are relationships between de-skilling and convenience ingredients, and what part, if any; re-skilling plays within convenience foods.

The definition of convenience ingredients and related typologies was reviewed and it was found that in general most definitions referred to convenience foods or pre-prepared food products, as opposed to convenience ingredients. A more contemporary working definition of convenience ingredients was created for the research. Typologies were seen as being integral within the literature reviewed, in linking consumers with behavioural attitudes and were reviewed to try to understand whether there were similar typology links between chefs and the use of convenience ingredients that were relevant to the research.

A review of attitudes and behaviours uncovered many consumer-focused research papers from which to draw information, and this section also reviewed predicting behaviour including implicit and explicit attitudes and attitudinal ambivalence, to understand how these behaviours might influence chefs and their habits, such as the purchase and use of convenience ingredients, and how ambivalence could be seen, for example, as a chef holding an attitude of dislike to convenience ingredients in general whilst simultaneously allowing the same attitude of dislike towards convenience ingredients to co-exist with the usage of ingredients in such a way, such as food safety, that suggests both attitudes are positive, and that negative elements could be leveraged to the chef's advantage.

Acceptability of convenience ingredients was reviewed, along with authenticity and food choice decision making, with research uncovering a number of related papers that suggested acceptability could be determined via a number of factors including lack of skills, value for money and new experiences. In relation to ingredients and recent trends, hotels had not exploited the healthy approach and references in a

number of publications, to convenience in general, were to fast food such as burgers, and highlighted unhealthy attributes such as fat and sugar. Brand acceptance was also looked at to understand whether there was any relationship between brand and purchasing habits.

Educators and their influences on culinary development were reviewed, suggesting they [educators] did not spend enough time with current practice as opposed to more time with the hotel and restaurant sector. Observations on skills development also highlighted the idea that catering colleges are geared to an elite set of skills at the expense of current practice. Constructivism in education provided a philosophical background and Splitter's (2009: 139) definition, when linked to culinary education, suggested that it had not kept pace with current practice. The awareness of convenience ingredients in contemporary text books was reviewed and many references found to convenience, and suggestions to carry out comparisons of various brands of food, and between convenience and un-prepared food.

Chapter 3 Methodology

3.1 Introduction

In this chapter the methods of each element of the research are described, explored and evaluated, so as to gather and collate the primary data as well as document the methodology chosen to test the research questions. The research has provided an opportunity to review literature related to convenience ingredients and their use by hotel chefs and chef lecturers, to question and challenge assumptions and to re-examine the traditionally held views of hotel chefs and chef lecturers through challenging enquiry. Cross-sectional research (triangulation) and cross comparison methods of two groups of chefs from the hotel and college sectors of the foodservice sector of the hospitality industry were chosen as the methods to be employed over the same periods of time. The reason for this was to understand whether there were any significant differences in the respondent's attitudes towards convenience ingredients and their use in their respective operational environments, which could be employed by food manufacturers for more effective sales and marketing.

3.2 Research governance

The research was conducted within the guidelines and standards for social research and received the ethical approval of the University of West London's Research Ethics Committee. All individuals within the research consented and all data confidentiality has been strictly maintained at all times.

3.3 Philosophy

The philosophical direction of this study was constructivist, recognising that within the enquiry there was a requirement to take into account the needs of the chef experience and the environment by accounting for "*social and historical contexts*" as outlined by Schwandt (2007: 39). Sarantakos (2005: 37) stated that when understanding what is being constructed it is worth noting that: "*meanings are not*

fixed but emerge out of people's interactions with the world" This suggests that work practices within hotel kitchens and college kitchen classrooms are seen differently by different people. Thompson (2010) advised that there was a phase in thinking, by some, that linked the sole task of philosophy to the clarification of the meaning of words, on the assumption that once linguistic challenges had been met then the meaning of life would follow. The attitudes and behaviours of hotel chefs and college chef lecturers towards convenience ingredient use required further research to clarify meanings constructed by individuals regarding their definition, understanding and use. This research and its methods correlated to further advice from Thomson (2010: XX1).

"To rise above the language, explore the basic ideas and concepts it expresses and then move on to examine features about the world that would not have come to light without that process of serious thinking and analysis."

Constructivism, similarly to interpretism, recognises that experience and meaning come from the mind, and meaning is constructed from that process and its accumulation of knowledge and the relationships between events, things and people, and the mind (Wisker 2008 and Schwandt 2007). Newmann *et al.* (1995: 4), discussing constructivism in education, stated:

"Constructivism is, primarily, an epistemological and psychological thesis about how we learn, viz. by actively and self-consciously bringing our past experiences and understandings (which may or may not bear the status of knowledge!) to bear in a collaborative exercise with other learners, as we process, interpret and negotiate the meaning of the new information.."

Newmann's views of constructivism and methodology correlate with the methodology of this research in that it brings past experiences to bear whilst processing, interpreting and demonstrating the meaning of new culinary information.

3.4 Methodology

Sarantakos (2005:30) describes methodology as *“The nature of research design and methods”* and asks *“How do we gain knowledge about the world? Or better: How is research constructed and conducted.”*

Phenomenological observation was adopted within the research questionnaires to consider the way chefs make sense of their culinary world and how they construct it in regard to the thought processes employed to create recipes. The rationale of this methodological approach was to be able to describe and analyse the everyday thought experiences of chefs and their relationship to convenience ingredient use, within a craft based culture, that is structured, meaningful and shareable (Sarantakos 2005).

3.4.1 Mixed methodology

A mixed method dual approach (triangulation) was adopted not only to enrich the research but to provide cross comparison and analysis of any significant differences between the hotel chefs and college chef lecturers that may be established. The use of quantitative and qualitative methods within the context of this research was also seen as complimentary and included:

- a) Standardised quantitative questionnaire survey
- b) Semi-structured qualitative interviews

The rationale underpinning the quantitative method used was empiricism, and an understanding of the central requirements of quantitative research such as objectivity, for example empiricism supporting the view that knowledge is experience, mediated through the senses, and with insight being achieved through pure experiences (Sarantakos 2005).

3.4.2 Method of secondary research

Secondary research was undertaken through a literature review of electronic peer reviewed research papers and hard copy academic publications which are listed in the bibliography. Investigation of the literature relevant to convenience ingredients and their use by chefs has been a challenge. Databases such as EBSCO HOST and Emerald traditionally default to convenience foods when the first word 'convenience' is entered. Use of the words 'convenience' and 'ingredients' also failed to provide any current or previous research into convenience ingredients.

Research papers and publications were reviewed and analysed to form a conceptual and theoretical framework for this study. Six very clear areas were highlighted within the framework of the research questions:

- a) *The definition of convenience ingredients*
- b) *Chef typologies – the type of chef using or not using convenience ingredients*
- c) *Attitudes and behaviours to convenience ingredients and their use*
- d) *Acceptability of convenience ingredients*
- e) *Kitchen culture and links to convenience ingredients*
- f) *Culinary education and professional development of convenience ingredients.*

These areas were seen as closely linked to the use, awareness and understanding of convenience ingredients by hotel chefs and chef lecturers, and underpinned the structure of the literature review. Starting with a review of the definitions of convenience, the study then looked at typologies and reviewed links to chefs and convenience ingredients and from there reviewed a number of levels at which attitudes and behaviour towards convenience could be portrayed as important facets in the culture of both the professional chef and the chef educator. Acceptability was

linked to convenience orientation, and food choice. Kitchen culture and its relationship to chefs and management attitudes were reviewed and finally the relationship between educational development and convenience was studied in order to understand attitudes, behaviours and barriers to professional development in the field of convenience ingredients. The review was constantly added to and refined within the researcher's databases.

3.5 Primary data collection

3.5.1 Design of the questionnaire

In constructing the quantitative questionnaire a focused and systematic process was adapted from Sarantakos (2005: 254) including: preparation, construction, self-critique, external scrutiny and pre-test, re-examination and revision, pilot study, reformulation and formulation of the final draft. The qualitative instrument method was adapted from the quantitative instrument method and the final questionnaires were based on the qualitative interviews which were conducted in a semi-structured/standardised format. The design of the instruments used a methodological logic of research design as adopted from Hart (2005). The approach was non-experimental and included questionnaires of fixed quantitative and qualitative design (Sarantakos 2005).

The quantitative questionnaire was specifically tailored to enable hotel restaurant chefs and chef lecturers to reflect on slightly different educational development and working environments. The size, degree of difficulty and time required to complete the questionnaire were appropriate considerations for an effective response rate and Sarantakos (2005) provided guidance about relevance, symmetry, clarity and simplicity among other criteria, as well as for compliance with the basic rules of

questionnaire construction, and was constantly referred to throughout. Candel's (2001) model and the influence of Olsen *et al.* were adapted within the survey instrument in Questions 10 and 11 to establish relationships between non-convenience food ingredients and convenience ingredients and their use. The findings can be viewed in Sections 4.3 and 4.4.

3.5.2 Quantitative survey instrument

Questions were developed from examples in Sarantakos (2005), from previous research undertaken during the researcher's International Culinary Arts degree dissertation and in the style of Olsen *et al.* (2008) who used a semantic seven-point differential scale anchored by two items, such as dissatisfied and satisfied. The questionnaires were designed as ordinal, not numeric, for ordered data collection with both Likert and semantic rating scales. The size of the questionnaires reflected the number of research questions to ensure that there were as many as necessary to achieve adequate answers and as few as possible to reduce respondent apathy (Sarantakos 2005). The draft questionnaire was designed and developed to reflect the educational and development differences between hotel chefs and college chef lecturers. Both included the same participant information section in order to outline the reasons and outcomes of the survey. No respondent names were required or requested and this section advised of the respondent's anonymity. Subsequent completion was seen to convey the respondent's consent.

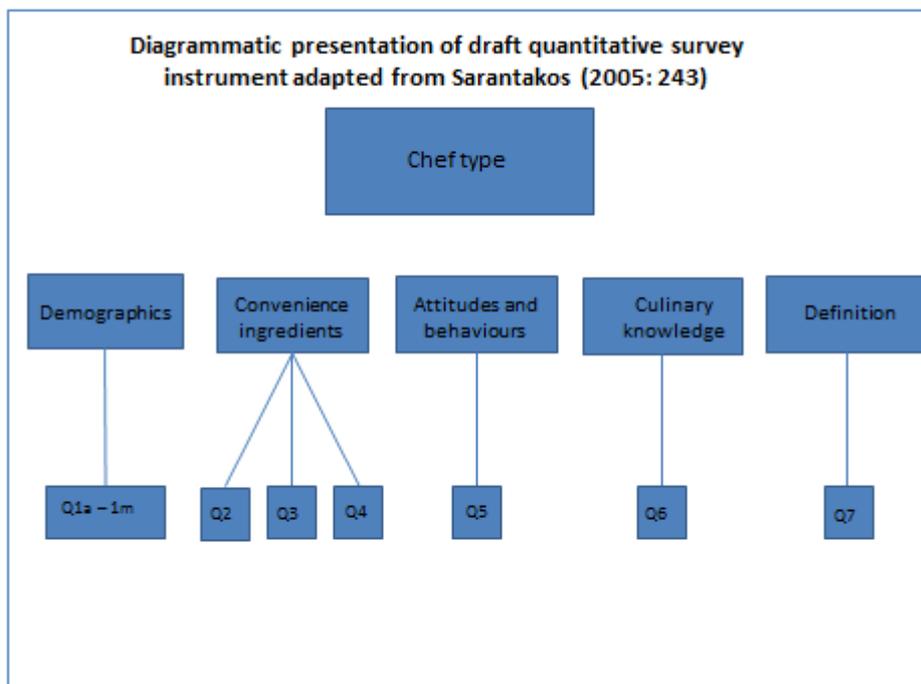
The initial draft contained a demographic section with thirteen questions and six sections with main question headings including questions on years in the industry, current employment education levels and chef typology. The six main section headings included professional use of convenience ingredients, convenience

orientation, and acceptable levels of convenience, attitudes and barriers to the use of convenience ingredient by professionals, knowledge of modern professional ingredients and definition of professional convenience ingredients. A copy of the initial draft can be viewed in Appendix 1. The question styles employed included:

- a) Fixed alternative questions: e.g. 'I prefer using ingredients that are', followed by twelve choices e.g.: 'are a mix of fresh and convenience'. The respondent was offered five Likert scale options, to answer from strongly agree to strongly disagree.
- b) Primary Questions: e.g. Do you use these ingredients in your hotel/college kitchen? followed by seventeen ingredients, e.g. 'mayonnaise or oil based dressings' with three options to choose from: used, not used, and not known. This also included an alternative 'other' option allowing the respondent to specify in their own words.
- c) Direct Questions: e.g. 'How best would you describe yourself as a chef?' for which the respondents were offered eight options, with only one to be selected. This also included an alternative 'other' option for which the respondent had to specify in their own words. Other direct questions allowed

A diagrammatic interpretation of the draft questionnaire structure can be viewed in Figure 3.1, and the full draft can be viewed in Appendix 1 (Sarantakos 2005).

Figure 3.1 Diagrammatic presentation of the draft quantitative questionnaire



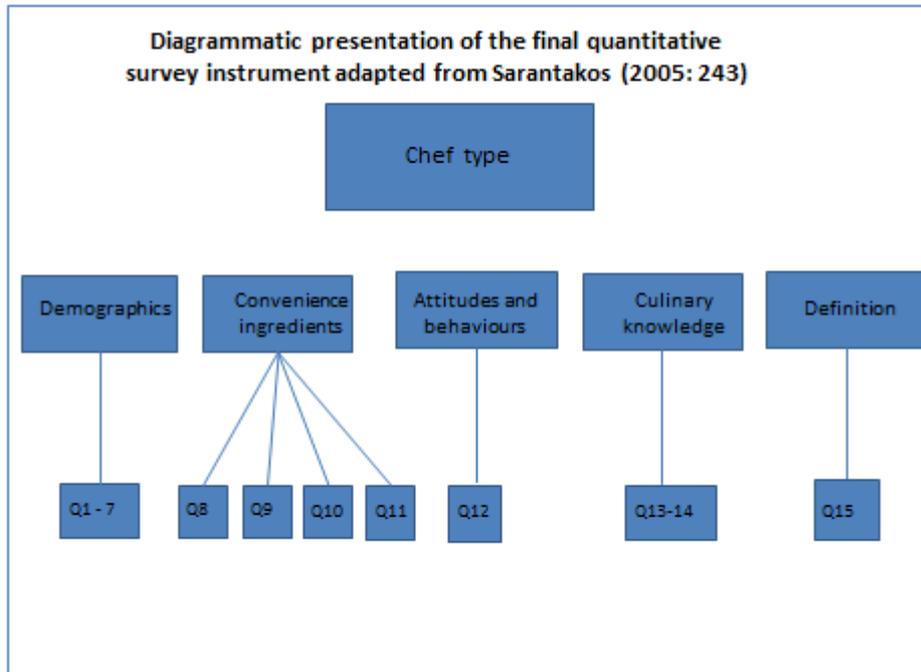
Adapted from Sarantakos (2005:243)

The initial draft questionnaire was circulated to my research supervisors and an industry colleague who acted as an initial mentor, and subsequently a final questionnaire with seven sections was constructed featuring a number of adjustments based on their recommendations:

- a) The number of demographic questions reduced from thirteen to seven
- b) The number of main questions directly related to the research increased from six to eight
- c) The overall number of questions reduced from twenty to fifteen
- d) A choice of definitions being offered rather than the respondents constructing their own which was seen, potentially, as a barrier to respondents completing this particular question
- e) Simplification of the section headings of for clarity and brevity.
- f) Reduction of Likert scale from 7 to 5 items
- g) Use of an electronic survey instrument – Survey Monkey

The final quantitative survey structure in Figure 3.2 illustrates the changes made from the draft document in Figure 3.1 and can be viewed in Appendices 2 and 2a.

Figure 3.2 Diagrammatic presentation of the final questionnaire



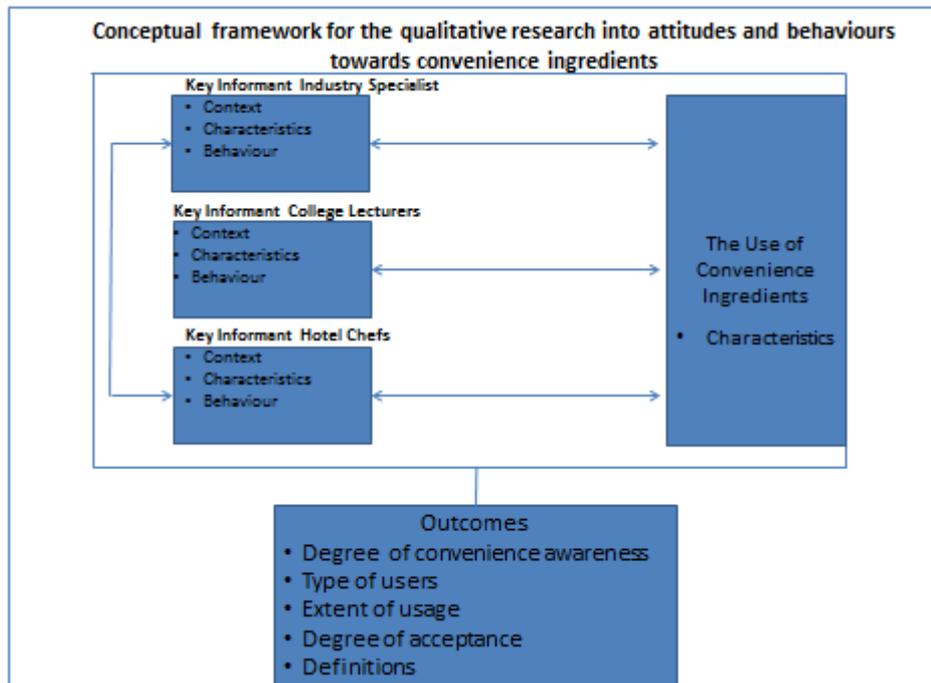
Adapted from Sarantakos (2005:243)

3.5.3 Qualitative interviews

Miles and Huberman (1994:5) saw the paradigms for conducting social research “*shifting beneath their feet.*” They saw researchers taking a more pragmatic view of the world, the importance of researchers sharing their craft and the development of practical standards that can work with different views but still be accountable for the “*rationality*” and “*trustworthiness of our methods.*” In this spirit the qualitative research undertaken adopted a pragmatic approach of semi-standardised/structured interviews using the main questions, eight to fifteen, of the draft quantitative survey questionnaire which can be viewed in Appendix 1. The rationale for this dual approach was to minimise complexity and maximise the effectiveness of the breadth and depth of information gained from the process. Using the quantitative document

provided a format that would ensure the qualitative question process mirrored that of the quantitative process. The conceptual framework, shown in Figure 3.3, graphically and narratively outlines the main areas to be studied and key informant criteria such as experience and industry standing (Miles & Hubermann 1994).

Figure 3.3 Conceptual framework for qualitative research



Adapted from: Miles and Hubermann (1994:18)

3.5.4 Pilot survey/semi structured interviews

While time consuming, both geographically and socially, pilot testing through semi-structured interviews was seen as an important part of the research, not least because it was an additional opportunity to generate and provide sources of rich information that in turn should provide valuable data for analysis. Transcripts from the pilot interviews can be found in Appendix 7. Goals of the pilot survey/structured interviews included (Sarantakos 2005):

- a) Providing an opportunity to measure the research questionnaire in advance of the main survey.

- b) Identifying weaknesses and other ambiguities and errors in advance of the main instrument being administered.
- c) Using key informants as the sample to reflect the wider sample and target population of the survey.

3.5.5 Population

The target population for this research was hotel chefs and catering college chef lecturers operating in the UK in four and five star hotels and catering colleges. In researching the attitudes and behaviours of the sample group of hotel chefs and college chef educators regarding professional use of convenience ingredients, which was one of the research questions, it was essential to understand just how much the organisational culture of management was in tune with the occupational culture of the chef. This meant closer scrutiny of certain attributes related to culture and identity, and how they are affected by factors such as economic and marketing conditions that in turn are focus on standardisation and de-skilling and may have an effect on the use of convenience ingredients.

3.5.6 Sampling technique

The sampling technique employed was purposive with the criteria being the knowledge and experience of the respondents (Sarantakos 2005). This allowed for the employment of a relevant and representative cross-section of hotel chefs and chef lecturers from a population that, in my experience, were resistant to convenience ingredients and their use. The samples chosen were seen as a cross-representation of the target population, from head chefs and culinary chef directors employed in four and five star hotels and chef lecturers from catering colleges throughout the UK. The catering college chef lecturer sample proved to be more difficult to establish in relation to addresses and contacts. Subsequent research and

networking established that support could be provided by the Professional Association of Chef Educationalists (PACE) who initially indicated that they would contact 100 colleges on my behalf on receipt of the details and criteria for the survey, which was duly done.

3.5.7 Sample size

The hotel chef sample was drawn from head chefs in four and five star and luxury hotels and professional chef organisations whose membership included high proportions of these types of chefs and included:

- a) Royal Academy Culinary Arts (130)
- b) Federation Chefs Scotland (50)
- c) Master Chefs GB (25)
- d) Chef network of researcher(30)
- e) Marriott Hotels UK & Ireland (50)
- f) MacDonald Hotel Group (30)
- g) Hilton Five Star hotels(25)
- h) Warner Hotels (10)

Total 350 Chefs

This group of hotels and professional chef associations met the criteria of the research in that the hotels were within the four and five star and luxury categories and the professional associations had a large head chef membership drawn from the hotel restaurant sector to which the researcher did not have direct access. The chef lecturer sample was drawn from 100 catering colleges across the UK and linked to the Professional Association of Catering Educationalists (PACE) with the criteria that the respondents should be currently employed in teaching catering students.

The response rates were:

- a) 180 hotel/restaurant chefs (51%) responded from the original emails sent out to 350 chefs.
- b) 67 chef lecturers responded from the emails sent via PACE [to a verbally advised 100 colleges], but it was not possible to truly measure the response rate.

Whilst the chef lecturer response rates were below initial expectations it was felt that both sets of responses were sufficiently focused and targeted to provide a valid response and provide statistically creditable data from chefs and chef lecturers from around the UK.

3.5.8 Selection of key informant representatives

The selection criteria required a small number of key informants with considerable experience and industry standing, from a wide geographical spread of the UK within the world of four and five star luxury hotel restaurants and catering colleges, and also required the interviewees to have trust in the researcher. Six key informants were seen as representative and were:

- (a) The culinary chef director of a London college
- (b) A 5 star luxury hotel group culinary chef director
- (c) A 5 star Hilton hotel executive chef
- (d) A senior lecturer from a London college.
- (e) A consultant chef with four and five star hotel, and chef lecturer experience
- (f) A 4 star De Vere Hotel executive chef

The interviews were not only an instrument of qualitative research they also had a dual purpose in that they were used as a form of triangulation and reliability in the construct of the quantitative instrument.

3.6 Administering the survey instruments

Internet sampling was used as the main method of administering the questionnaire instrument, requiring the construction of two separate questionnaires with two separate links in order to keep separate and identify chef lecturer and hotel chefs for cross comparison and data analysis. This administration was seen as the most effective way of reaching the sample across the target population, minimising both time and cost and providing a vehicle for effective and rapid response.

It was important for interviews to be conducted in an environment conducive to openness and honesty, and so [as a counterbalance to any possibility of a lack of credible response] the interviews took place at locations and timings of the interviewee's choice.

3.6.1 Administering the questionnaires

Survey Monkey was selected for administration, as this was seen as a very modern way of conducting surveys with the added value of providing instant data. The hotel chef and chef lecturer sample was administered directly by email and were subsequently directed to a web page link (URL) to which they input a code and then completed separate questionnaires. On completion by the respondent the questionnaire was electronically submitted and centrally collated by the survey software system. Regular inspection of the web page provided an ongoing overview of how the completion of sampling was progressing in terms of completed submissions. When setting up the electronic survey link there was a requirement to set a start and finish date. The link was available for a month during September 2011 and after that period it was extended for a further week, to allow for further submissions, with a reminder sent out to the hotel chef sample and to the PACE

organisation to forward to the chef lecturer sample. Data from the survey was received electronically in two formats:

- a) Collated documents of both sets of respondents including response rate and response rating
- b) An excel document of raw data that was necessary for SPSS data input

Copies of the completed survey instrument, with responses and percentages, can be found in Appendices 2 and 2a.

3.6.2 Administering the interviews

These interviews took place over the period between July and September 2011 and an email describing the purpose of the survey, length of time of the interview, the type of interview, and the recording technique used was sent to the six key informants several months before the proposed interview start date. All key informants agreed to participate and each interview was scheduled for approximately 45 minutes.

3.6.3 Incentive

In line with the researcher's commercial sales and incentivised industry background, an incentive to assist in the take up and completion of questionnaires was introduced. The incentive was a prize in the form of the six complete volumes of *Modernist Cuisine The Art and Science of Cooking* by Nathan Myhrvold with Chris Young and Maxime Biletlet. To allay any question of ethics this incentive was funded personally by the researcher. To take part in the incentive respondents were required to submit their email address at the end of the questionnaire. The response rate for this was:

- a) Hotel Restaurant Chefs 121 (67.2%)
- b) Chef Lecturers 41 (61%)

The draw to select the winner of the incentive was held publicly at Unilever's headquarters in Leatherhead, on 13th November 2011, in front of an audience which included some of the respondents. The winning respondent was drawn from a box of all the respondent email addresses by a representative from Russums. The winner of the incentive was a chef from the Marriott Hotel Group. The incentive was forwarded on to the Marriott chef and all others were advised by email.

3.7 Quantitative data analysis

Data analysis for the quantitative research was conducted using bi-variate analysis, cross-tabulation and chi-square tests of independence, comparing the results of one question with another to allow for investigation of relationships between variables such as attitudes, opinions and organisations. Triangulation using both quantitative and qualitative data was seen as a tool to support the provision of validity and reliability in terms of the construction of accurate definitions and measurements of reliability (Hart 2005). Comparative analysis of quantitative data was conducted through nominal-level chi-square testing to measure tests of significance to provide information about whether the findings were a truthful reflection of what happens in the target population.

3.7.1 Significance testing and comparative analysis

A central focus of the research was the ability to make a comparative analysis of the quantitative data from both sets of respondents in order to understand whether either one or other of the respondent sample groups found convenience ingredients and their use more acceptable. To manage this undertaking, a comparative analysis through chi-squared tests, nominal-level tests of significance to ascertain the degree to which the findings of the research could be generalised, was seen as the most appropriate method of highlighting significant differences within the respective data.

The level of significance has a range from 0 to 1, where 0 provides a high probability that the findings are reflective of the target population and the opposite significance level of 1. A significance level provides an indication of the risk of rejecting the null hypothesis (H_0) rather than accepting it, a risk we are prepared to accept, and is referred to as alpha (α) (Sarantakos 2007).

The chi-square test of independence two-variable test was employed to establish whether the two variables are independent from or related to each other. The H_0 states that the variables are independent. The relevant point of measurement in this test was the level of significance which is noted within the table as 'Asymp.Sig (2-sided)'. The bigger the value of the calculated chi-square statistic the easier it is to reject the H_0 . The significance (sig.) values commonly accepted in social research are 0.05 and 0.01, where 0.05 allows for a 5% and 0.01 allows for a 1% level of probability in rejecting a true H_0 . If that value is more than 0.05 the result can be said to be less significant whereas at the 0.01 level the study is seen to be more precise and the result can be seen as more significant. The tests are also an example of non-parametric testing, are typically used with categorical data (such as 1= Hotel Chef and 2 = Chef Lecturer) and are based on a different principle to classic t-tests and their variants, and on the idea of differences between observed and expected frequencies (O-E). The professional chef and chef lecturer data was extracted from the Survey Monkey Excel version of the quantitative survey and inputted into SPSS to provide cross-tabulation charts divided into two sets of data highlighting the count, expected count, the total number of respondents and a chart highlighting the chi-squared tests and reflecting the sig. value through a Pearson chi-square Asymptotic

Significance (Asymp. Sig) (2-sided) measure of any significant difference (Hart 2007, Sarantakos 2005).

3.8 Qualitative (content) analysis

The qualitative data content was analysed using a hermeneutics method of interpretation on the understanding and meaning of the whole of the text and an understanding of its parts which were an interdependent activity (Hart 2005, Sarantakos 2005). I undertook an approach that was contextual and studied the attitudes and behaviours of the respondents in order to ensure that meaningful statements and the emergence of key themes were easily recognisable. The recorded interviews which took 45 minutes on average, were transcribed into separate word documents and were based on the four main research questions relating to convenience, and further separated into the key question elements of convenience ingredients and attitudes, and behaviours as listed:

Convenience ingredients:

- a) Convenience orientation
- b) Educational acceptance
- c) Definition
- d) Chef type

Attitudes and behaviours:

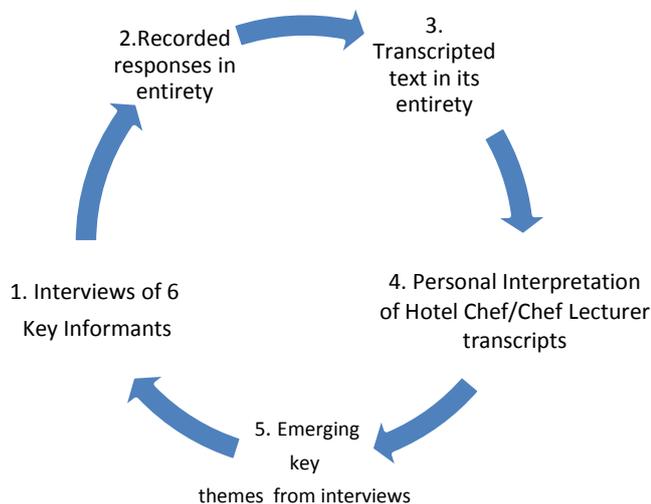
- e) Acceptability
- f) Use of convenience ingredients

A diagram of the main emerging themes of the content analysis can be viewed in Section 4.1 of the findings chapter. The full transcripts can be viewed in Appendices 2 to 2e.

3.8.1 Content analysis process

The response outcomes were contextually analysed by studying the content of text [content analysis] with a focus on meanings, interpretations and the similarity of statements, set by the research questions, from both the hotel chefs and chef lecturers. Figure 3.4 provides an overview of the process, beginning with the semi-structured interviews (1), which were conducted separately, the responses recorded in their entirety (2), the transcription from recording to Word documents sub-divided to reflect the main categories of the interviews (3), my interpretation, comparison and understanding of the transcripts (4), and the emerging key themes (5). The qualitative responses were used throughout the findings and discussions to correlate with and compare to the responses of the quantitative findings, and also reflected my understanding of the key themes that emerged. Those responses were used within the findings and can be viewed in Section 4.

Figure 3.4 Hermeneutic method of interpretation, adapted from Schwandt (2007)



3.9 Assessment of the research

3.9.1 Reliability

Reliability is an epistemic criterion that is seen to be necessary but does not on its own provide sufficient background to establish truthful accounts or interpretations of social phenomenon. The reliability of an account is accepted if that account can be replicated by another enquirer. Traditionally it has been assumed by social scientists that validity can only be attached to repeatable or replicable observations however all valid accounts can be seen at least, in principle, as replicable (Schwandt 2007).

Sarantakos comments that a number of writers argue about the merits of quantitative and qualitative reliability, suggesting that qualitative research lacks the same degree of reliability as quantitative (Sarantakos 2005). Qualitative reliability within this research can be claimed from a number of standpoints including the researcher's point of view relating to the collection of data, the identity and status of the key informants, the meticulous collection and transcription of the data, and the use of mixed of both quantitative and qualitative methods, providing a counterbalance between both sets of data. Internal reliability would be more difficult but could be partly claimed through a careful audit trail of the data.

3.9.2 Validity

Validity in social science is one of a number of criteria seen as a benchmark for inquiry, which suggests that findings are true and accurate, with 'true' reflecting the phenomena and 'accurate' meaning that findings are backed by strong evidence with no reason to doubt the findings or the evidence provided (Schwandt 2007).

Quantitative research can claim construct validity in that the theoretical construct is valid. The research instrument measured a number of constructs within the use of

convenient ingredients including; attitude and behaviours to convenience acceptability, convenience orientation and workplace attitudes (Hart, 2005). The instrument tested two groups of chefs on their views and attitudes towards convenience ingredients and their use and found that there were significant known differences, which are highlighted in the findings of Section 4 and discussed in Section 5.

Qualitative research which requires dependability, conformability, audibility, credibility, trustworthiness and transferability can also claim validity through “*argumentative validation*” and presentation of the findings (Sarantakos 2007: 86). For example, in attitude variability this can be presented comparatively by using the key findings of the qualitative interviews that were conducted using the same research instrument as for the quantitative instrument, but are more descriptive from the verbal responses. The qualitative research was undertaken via electronic recording and professional transcription, providing data closer to reality than in quantitative research, and the methods used were more open and flexible than in quantitative research. Validity was also enhanced by using the mixed methods of both quantitative and qualitative findings, providing a counterbalance to both sets of data.

3.9.3 Generalisability (external validity)

There are a number of ways of generalising data to the entire population, such as scientific (inductive) and naturalistic, which are theory-related and are typically seen to be representative of a subject which, on review, can be seen as applicable within that subject area (Sarantakos 2005). Miles and Huberman (1994) cited by Sarantakos (2005) suggested three levels of generalisation from sample to

population, and from analytic and case to case transfer. The level at which this research can be viewed is from sample to population, although Miles and Hubermann (1994: 279) cited by Sarantakos (2005) suggested that this level was *“less helpful for qualitative studies.”*

The high level of agreement by the two sets of respondents separately researched in much of the research, and both the quantitative and qualitative findings, confers a degree of dependability, transferability and credibility of the findings of the sample to the whole population of hotel chefs in four and five star hotels and chef lecturers in catering colleges. The choice of a cross-section of chefs from a variety of hotel and college backgrounds throughout the UK provided geographical representativeness. There is recognition and acknowledgement that the non-consideration of the participant’s gender and ethnic culture as influencing factors in the study limit the generalisability of the findings, however, the transferability of the findings remains strong.

3.9.4 Critique of the methodology

Research studies have to manage limitations and expectations and this study was conducted with those limitations in mind. A limiting factor in the research methodology was leaving my place of employment one year into the study, relocating of over 400 miles away, and setting up a new business. In effect, although the survey questionnaires and interviews were completed, all the initial enthusiasm, findings and analysis work, was put on hold, and the best part of an academic year was lost.

Another limitation was the lack of my experience in qualitative research; however this was addressed through discussion with my supervisors and work colleagues with relevant focus group and similar experience, and reference to a number of publications such as Sarantakos (2005) and Hart (2005). A strength of the research was the reach that my industry network allowed for easier access to a wide range of four and five star and luxury hotel chefs whereas a weakness was the lesser access to chef lecturers that required third party support that was less reliable. The electronic survey (Survey Monkey) was a strength in that it was quick and reliable and provided edited responses and response rates, however a weakness of this was the complexity of collating the response data and inputting it for SPSS data analysis.

CHAPTER 4 Presentation of quantitative and qualitative findings

4.1 Introduction

As presented in Chapter 3 the findings were a result of cross-sectional research (triangulation) and cross comparison of two groups of chefs from the hotel and catering college sectors of the foodservice sector of the hospitality industry. The rationale for this was to understand whether there were any significant differences in the respondent's attitudes towards convenience ingredients and their use in their respective operational environments. The purpose of the chapter was to provide a thematic breakdown of those findings and, it is structured to reflect the seven sections of the survey questionnaire:

- a) Demographics
- b) Use of convenience ingredients
- c) Convenience orientation
- d) Acceptability
- e) Attitudes and barriers
- f) Culinary education and professional development
- g) Definition of convenience ingredients

4.1.1 Quantitative findings

The findings of the quantitative research, undertaken for hotel chefs and chef lecturers through separate survey instruments, focused on questions where significant differences were established and on findings that whilst they did not establish significant differences were seen as significant in terms of consistency or inconsistency of agreement.

In the demographics section there were two questions, 4.2.1 and 4.2.2 with significant differences. Question 7 on typologies demonstrated no significant

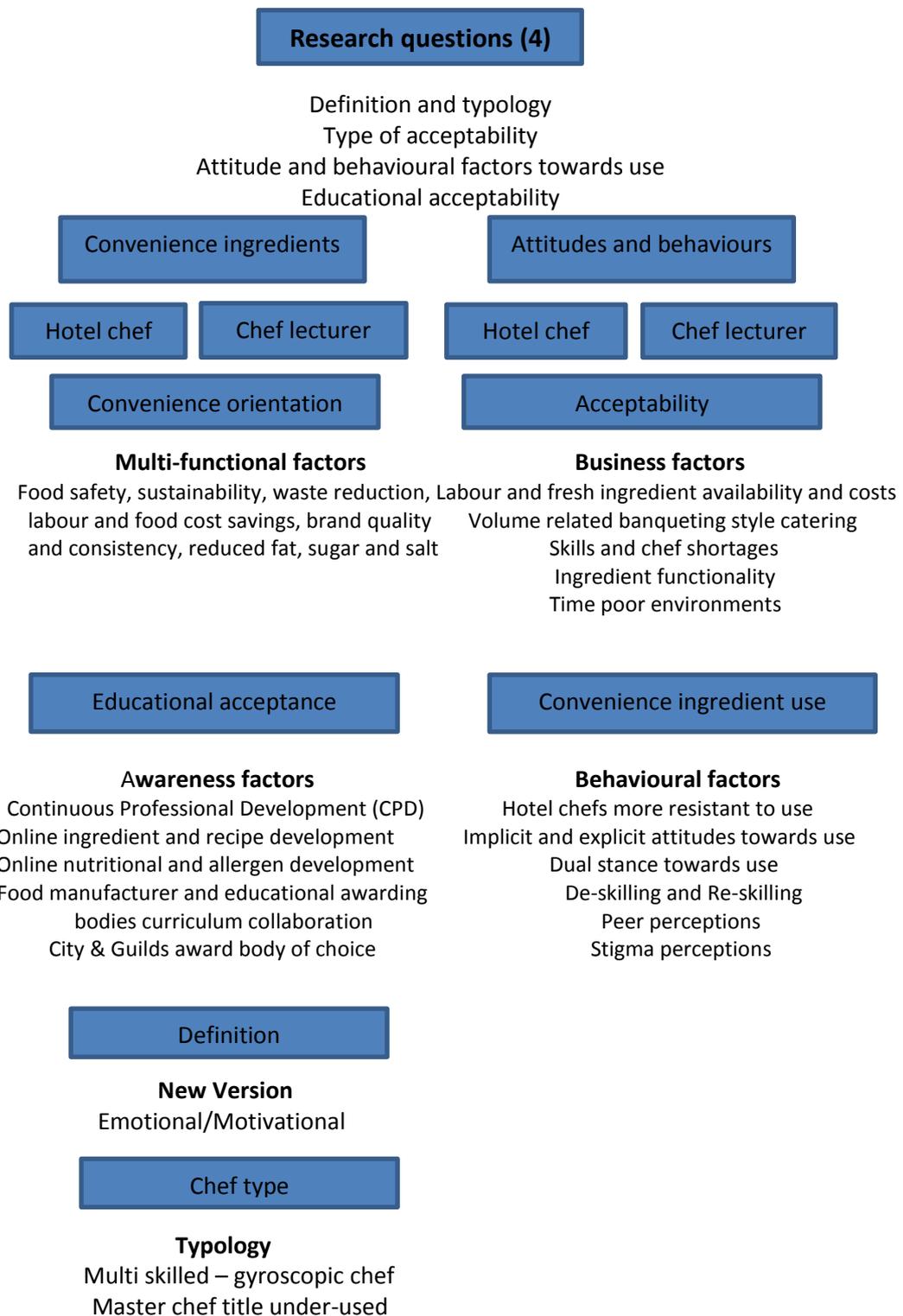
difference however it did have significance in relation to the research and is discussed in 5.1.6. Question 3 on job titles and Question 6 on professional chef association membership had no significant differences but highlighted some differences between the respondents that may have relevance to the research and are further discussed in 4.2.3 and 4.2.4. Further significant differences were found in Questions 8, 12 and 13 and are discussed in the following sections.

4.1.2 Qualitative findings

When carrying out the interviews the key informants were asked Questions 1 to 6 as they had been chosen for their experience and industry standing, which included a high level of culinary development and over twenty years in the foodservice industry. Their demographic details are available in the transcripts which can be viewed in the Appendices from 7 to 7e.

The findings of the qualitative interviews are featured throughout the chapter from Question 7 on typologies, and reflect and replicate the main themes that emerged from the interviews and from the content analysis that is mentioned in Section 3.8 of the methodology. A diagrammatic interpretation of the emerging main themes can be viewed at Figure 4.1.

Figure 4.1 Diagrammatic presentation of key themes emerging from the main research questions into the attitudes and behaviours of hotel chefs and chef lecturers towards the use of convenience ingredients



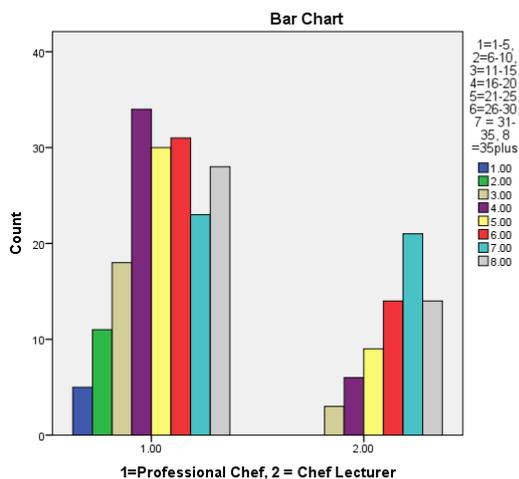
4.2 Section 1 – Quantitative findings of chef demographics

The quantitative findings of the chef demographics can be seen in the Q5 table of comparison in Appendix 5. The chi-squared findings of significance for this section can be seen in Appendix 3, the research data can be seen in Appendix 4, a summary of quantitative chi-square tests of significance and non-significance can be seen in Appendix 6, transcripts of the qualitative interviews can be seen in Appendices 7 to 7e and other comments from each section can be found in Appendices 8 and 8a.

4.2.1 Years worked in the food and hospitality industry

Q1 looked at the length of time the respondents had worked in the industry and sought to understand differences related to experience. The dual bar chart, Figure 4.2, based on the preference patterns of the respondents suggested there are significant differences.

Figure 4.2 Q1 years employed in the food and hospitality industry



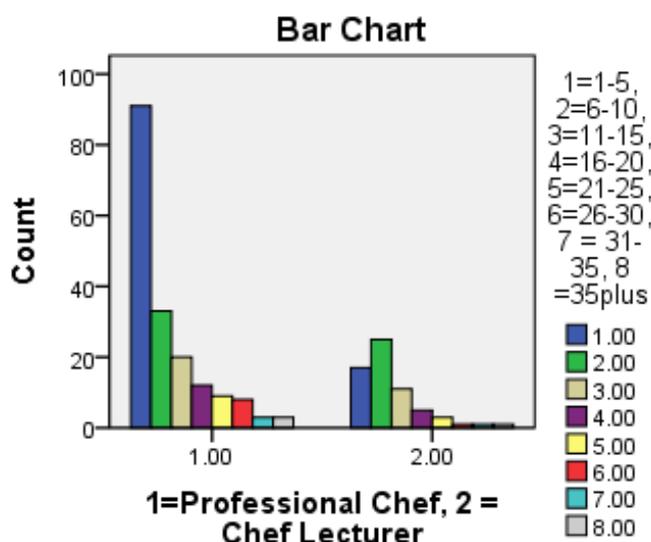
Given the high significance level [Asymp.Sig (2-sided) = 0.003] the H_0 is rejected and with it the assumption that the variables (years worked in the industry) are independent. It is reasonable to conclude that the variables are dependent; consequently hotel chefs and chef lecturers have built up different work patterns over

a period of time in the food and hospitality industry and there is a significant difference between the two groups of respondents. The findings indicate that chef lecturers tend to extend their longevity in the industry compared to the majority of their hotel chef counterparts, and also indicate that a chef lecturer will have completed ten years in professional kitchens prior to becoming a chef lecturer. In addition 35 (73%) of chef lecturers, as opposed to 54 (46%) of professional chefs, were active in their roles over 25 to 35 years, further highlighting differences in longevity at work. Key informants were not questioned on the years they had worked in the food and hospitality industry. The discussion of findings about years worked in the food and hospitality industry can be found in Section 5.1.1.

4.2.2 Years worked in current employment

Q2 looked at the length of time the respondents had worked in their current employment and sought to understand and measure any differences in relation to Question 1. The dual bar chart, Figure 4.3, based on the preference patterns of the respondents, suggests there are significant differences.

Figure 4.3 Q2 years in current employment



Given the high significance level [Asymp.Sig (2-sided) = .016] the H_0 is rejected and with it the assumption that the variables (years worked in current employment) are independent. It is reasonable to conclude that the variables are dependent; consequently hotel chefs and chef lecturers have built up different employment patterns within their current employment, and that there is a significant difference between the two groups of respondents. The findings indicate that professional chefs are twice as likely (50.8%) to have worked for up to five years in their current employment compared to chef lecturers (26.6%), and chef lecturers are twice as likely (39.1%) to have worked for up to 10 years in their current employment as opposed to professional chefs at 18.4%. The findings and discussion of years worked in current employment can be found in Section 5.1.2.

4.2.3 Job title descriptions

Q3 offered hotel chefs four choices to describe their job title; executive head chef, executive chef, corporate executive chef and senior sous chef, as well as the option to specify another title. When asked how they would describe their job title chef lecturers were offered the choice of 'chef lecturer' and the option to specify something else.

Of the 180 hotel chef respondents 68, just over one third, 38%, described themselves as executive head chef, 21% as executive chef, 7% as senior sous chef, 2% as corporate executive chef and 32% as another title including head chef, ex-executive chef now director of hotel operations, and food and beverage director. Of the 67 college respondents 68% described their job title as chef lecturer with 32% opting for other titles that included assistant dean of college food (still actively teaching, chef and hospitality lecturer and chef lecturer managing the department. The findings and discussion of job title descriptions can be found in Section 5.1.3.

4.2.4 Professional chef qualifications

There were no significant differences within Q4 on chef qualifications however there was significance in that the responses for each option were very similar. Fifty seven (86%) chef lecturers and 124 (71%) hotel chefs had attained City & Guilds professional certificates, which indicate a strong preference for this vocational education provider. The findings also indicated that chef lecturers are more likely to have formal professional catering qualifications than hotel chefs. The findings and discussion of qualifications can be found in Section 5.1.4.

4.2.5 Additional training schemes and culinary development

Q5 looked at the training schemes undertaken by the chef lecturers to become lecturers in food and hospitality, and hotel chefs were asked what culinary development they had undertaken to enhance their professional culinary qualifications. A very high level of chef lecturers 60 (91%) had undertaken the 'assessor award' which is seen as the main requirement in becoming an accredited 'lecturer'. In contrast, 106 (60%) of hotel chefs had undertaken additional culinary development through work experience at internationally acclaimed cookery schools and restaurants, and 51 (29%) had undertaken food and hospitality degrees or a culinary arts equivalent. Forty three (24%) of the hotel chefs had not undertaken any further culinary development. The findings indicate that chef lecturers, by the nature of their college/university role, are required to and are more likely to undertake formal training schemes to become chef lecturers than their hotel chef counterparts, whose findings indicate that they are not necessarily required to undertake additional culinary development to enhance their professional qualifications. The findings and discussion of additional training schemes and culinary development can be found in Section 5.1.5.

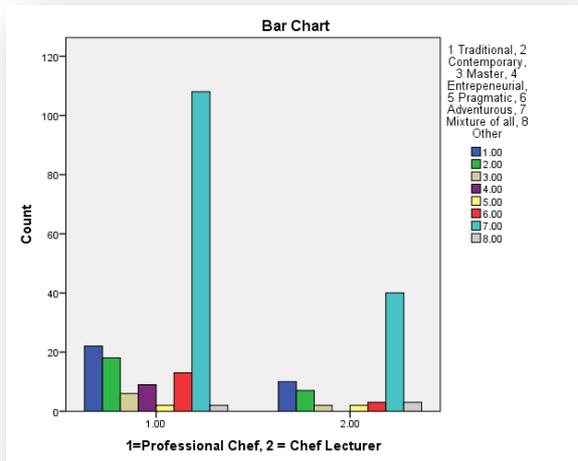
4.2.6 Membership of professional chef organisations

Both sets of respondents were offered a choice of six professional chef organisations in Q6 and the option to specify any other to which they belonged. Thirty six (56%) of the hotel chefs and 64 (96%) chef lecturers who answered this question did not belong to any professional chef organisation, but 110 (100%) of 110 hotel chefs (61%) who answered the question belonged to a variety of both national and international organisations. The Craft Guild of Chefs was the most popular professional chef organisation, with 49 (45%) hotel chefs and 15 (23%) chef lecturers as members, and may reflect the fact that the majority of respondents were from England where that organisation is seen as one of the premier chef guilds. The Master Chefs of Great Britain were also strongly represented by 41 (37%) hotel chefs as would be expected, and by 4 (6%) chef lecturers. The Royal Academy of Culinary Arts, whilst not listed on the questionnaire, was well represented across both sets of respondents by 31(17%) of the hotel chefs and 7 (10%) of the chef lecturers. The findings indicate that hotel chefs are more likely to belong to a professional chef organisation and this is further discussed in Section 5.1.6.

4.2.7 Chef typologies/food related lifestyle (FRL)

Q7 sought to find out how chefs in general and hotel chefs and chef lecturers in particular saw themselves in relation to a number of customer/consumer typologies including a marketing tool proscribed by business and industry to business operators such as chefs in order to segment them from a more focused sales perspective, with which to enable more effective focus and resources in sales and development. The dual bar chart, Figure 4.4, based on the chi-squared preference patterns of the respondents suggests there are no significant differences.

Figure 4.4 Q7 Chef Typologies



Given the low significance level [Asymp. Sig (2-sided) = 0.331] the H_0 is accepted and with it the assumption that the variables (attitudes to typologies) are dependent. and consequently hotel chefs and chef lecturers have similar attitudes to chef typologies and that there is no significant difference between the two groups of respondents who are both more likely to see themselves as a mixture of one or more of the typologies. The findings show that a high and consistent level of both sets of respondents, 108 (60%) hotel chefs and 40 (60%) chef lecturers, saw themselves as a mixture of one or more of the list of options. The findings on chef typologies are further discussed in Section 5.1.7.

4.3 Section 1 – Qualitative findings of demographics

The key informants were chosen for their considerable experience and industry standing from a wide geographical spread of the UK within the world of four and five star luxury hotel restaurants and catering colleges, and as such their demographic details in Section 1 to 6 were noted but not discussed. Their demographic details can be found in Appendices 7 to 7e.

4.3.1 Chef typology preferences

The qualitative data was very much in line with the quantitative data, with four of the key informants very clear that they saw themselves as a mix of all the typologies. Key Informants 4 and 6, both executive chefs of large four and five star hotels, saw themselves as both 'tradition oriented' and 'contemporary' chefs and in their words *"reflecting classical and traditional culinary training with contemporary development."* Key informant 1 was very clear that after traditional oriented influences from his early days of training he saw himself develop a variety of pragmatic, contemporary and entrepreneurial influences from mediums such as books, television, travel and competitions. Key informant 3 said:

"I see myself as a mixture of all the typologies but I need to weight some of those typologies more heavily in certain hotels than in others, where my chef's need little management in some hotels and a large amount of management in others..."

and further highlighted:

"I'm not really sure what master chef means, I have been a 'Master Chef of Great Britain' but wouldn't necessarily define myself as a master chef..."

Key informant 5 saw himself as "a mixture of all" and further stated:

"I think the ideal chef is a mix of all of these. I think they have to understand how it can be made from scratch and have to understand what's out there to allow them to be flexible enough to control it. They have to be entrepreneurial, adventurous, and they have to be cutting edge. I would say that the best of chefs nowadays is somebody that's got all these attributes but you can apply the appropriate attitude to the right scenario..."

The transcripts of the key informants can be found in Appendices 7 to 7e.

4.4 Section 2 – Q8 quantitative findings of the use

Question 8, on convenience ingredient use, was broken into seventeen sub-questions, 8a to 8q, and sought to understand how well chefs were aware of a sample range of convenience ingredients, currently used within the foodservice industry for both savoury and dessert recipes, and the extent to which they used, did

not use or did not know about them. The underlying picture from the respondents suggests that both hotel chefs and chef lecturers are familiar with convenience ingredients in general. The unknown ingredients are few and tend to be niche ingredients such as dairy and alcohol pastes. Four statements provided significant differences:

- a) Q8a: Paste, liquid, powder, bouillon, stock and fond bases
- b) Q8b: Paste, liquid, powder and granule jus bases
- c) Q8i: Reduced fat margarine spreads alternative to fresh butter
- d) Q8j: Dairy cream alternatives to fresh cream

These significant differences of the quantitative data are discussed further in Section 5.2. The chi-square tests of significance can be found in Appendix 3, the research data sheets can be found in Appendix 4, the tables of comparison of quantitative findings can be found in Appendix 5 and the other ingredients commented on can be found in Appendix 8. The qualitative findings can be found in Section 4.5.

4.4.1 Use of basic stock/bouillon bases

Option 8a looked at paste, liquid, powder, bouillon stock and fond bases which are manufactured versions of their fresh equivalents are kitchen preparations of fresh stock which are simmered for a number of hours to create aromatic bouillon with delicate flavours and a high clarity of colour. This process is labour intensive, can take many hours and is a highly skilled culinary process. The findings show that 125 (72%) hotel chefs and 56 (93%) chef lecturers use convenience stocks in their kitchens, with 48 (28%) not using them.

Given the high significance level [Asymp.Sig (2-sided) = 0.000] the H_0 is rejected and with it the assumption that the variables (attitudes to bouillon and its use) are

independent and consequently hotel chefs and chef lecturers have different attitudes to the use of convenience based bouillon and that there is a significant difference between the two groups of respondents, with chef lecturers more likely to use convenience based bouillon, stock and fond preparations than hotel chefs in four and five star hotels.

The high use by chef lecturers could be attributed to the findings in 4.2.1 that indicate a majority of chef lecturers have gained 10 years of industry experience prior to becoming a chef lecturer and within that experience may have used this type of ingredient and may be more comfortable with its use. Another factor may be the reduced hours of chef lecturer contact with students that make the practicalities of fresh stock/bouillon production difficult to manage due to the considerable preparation and cooking time, which can exceed eight hours in some cases, such as for beef stock/bouillon.

4.4.2 Use of basic jus bases

Option 8b, paste, liquid, powder and granule jus bases are manufactured versions of their fresh equivalents which are kitchen reductions of fresh stock that are simmered for a number of hours to create a naturally thickened aromatic bouillon with an intense flavour and high sheen. This process is also labour intensive, can take many hours and is a highly skilled culinary process. The findings show that 91 (53%) hotel chefs and 44 (75%) chef lecturers use this type of convenience ingredient, with 80 (46%) hotel chefs and 15 (25%) chef lecturers not using them.

Given the high significance level [Asymp.Sig (2-sided) = 0.011] the H_0 was rejected and with it the assumption that the variables (attitudes to jus and its use) are

independent and consequently hotel chefs and chef lecturers have different attitudes to the use of convenience based jus, and that there is a significant difference between the two groups of respondents, with chef lecturers more likely to use convenience-based jus preparations than hotel chefs in four and five star hotel and restaurant environments.

4.4.3 Use of reduced fat margarine spreads as alternatives to fresh butter

Option 8i looked at reduced fat margarine spreads which are factory produced emulsions of predominantly water and oil, with added vitamins such as vitamin D, whereas butter, a form of convenience, is seen as a natural dairy ingredient from the butter fat of cow's milk, generally with no additives. The findings show that 68 (40%) hotel chefs and 40 (70%) chef lecturers use this ingredient.

Given the high significance level [Asymp.Sig (2-sided) = 0.000] the H_0 was rejected and with it the assumption that the variables (attitudes to low fat margarine and spreads use) are independent and consequently hotel chefs and chef lecturers have different attitudes to the use of reduced fat margarine and spreads , and that there is a significant difference between the two groups of respondents, with chef lecturers more likely to use these reduced fat margarine/spread preparations than hotel chefs in four and five star hotels.

4.4.4 Use of dairy cream alternatives to fresh cream

Option 8j looked at dairy cream alternatives which are factory produced emulsions of predominantly water and oil similar to dairy spreads, and are manufactured to look, taste and perform like fresh cream but with reduced fat content and longer shelf life, which prior to opening does not require refrigeration, whereas dairy cream, also a

form of convenience, is seen as a natural dairy ingredient from cow's milk. The main difference between each ingredient is that one is manufactured and the other is fresh. The findings show that only 40 (24%) hotel chefs and 30 (53%) chef lecturers use dairy cream alternatives.

Given the high significance level [Asymp.Sig (2-sided) = 0.000] the H_0 was rejected and with it the assumption that the variables (attitudes to dairy cream alternatives to fresh cream use) are independent and consequently hotel chefs and chef lecturers have different attitudes to convenience based manufactured dairy cream alternatives and the use of fresh dairy cream, and that there is a significant difference between the two groups of respondents, with chef lecturers more likely to use convenience dairy cream alternatives to fresh creams than hotel chefs in four and five star hotel and restaurant environments.

4.5 Section 2 – Qualitative findings of the use

The key informants were all familiar with these types of convenience ingredients and their discussion and comments reflected the breadth and depth of their experience and knowledge. The majority of their responses were provided as simple yes and no statements. When reflecting on placing a greater emphasis on convenience ingredients with students and the relationship of convenience and fresh ingredients

Key informant 2 suggested:

“I think if time allowed, we should be able to not only teach the pure way, how to make it yourself, but also how to become more adaptable with the use of convenience products. In saying that I think that the restriction on time, particularly here in the college in our restaurant environment, I know for sure that way is happening in the student refectory where there is a separate staffing and probably a separate ethos as to how that is achieved. I know that in the student refectory they tend to adopt as much convenience as possible, whereas in the student learning area, it's very much a combination of the two.”

Key informant 3, a hotel group chef director, when articulating his general

acceptance of convenience ingredients and their purchase drew an analogy with what he saw as acceptable convenience and their purchase, and where that baseline of acceptance rested, and further suggested:

“I’ll give you an extreme example; you know when I’m talking about layers of convenience? I see olive oil as a convenience, if you use olive oil as opposed to going out and collecting olives and pressing them. That is a convenience. Buying peeled potatoes is a convenience, buying frozen peas is a convenience, but a lot of those things we’ve accepted as being acceptable and it’s understanding where that acceptable base is.”

Key informant 3 further suggested that:

“Acceptability lies in the knowing and understanding where that acceptable base lay.”

Key informant 1, a catering college culinary chef director, reflected on bouillon /stock use and said:

“It is important for students to be able to prepare and make fresh stocks but also important to be able to prepare and make convenience stocks.”

Key informant 1 further reflected on student use of convenience ingredients and Said:

“...how to use them and how we are actually doing this in an understated way right from the start of a student’s training. We look at stocks, for instance, as a convenience item. Yes, it’s very important for a student to understand how to make fresh stocks and to rotate the fresh stocks as well, but it’s equally important that they understand how to make convenience stocks as well; you could either make them too strong or too weak, there is an art to that. There’s also an art to using these stocks at the same time.”

4.6 Section 2a – Q9 Quantitative findings of the categorisation preferences for convenience ingredients displayed in purchasing lists

This question measures the chef’s attitudes to a collective descriptor preference for convenience ingredients to be listed and displayed in purchasing lists in order to more clearly identify and categorise such ingredients within their purchasing systems.

4.6.1 Descriptor preferences for convenience ingredient categorisation

There was no clear preference in Q9, as for example in the question of typology in Section 4.3, with 39 (22%) hotel chefs preferring option 8f, *'manufactured convenience ingredients'* and 15 (25%) chef lecturers preferring option 8e, *'pre-prepared convenience ingredients'*. Overall the most consistent and equally preferred descriptor for both sets of respondents was option 8e *'modern professional ingredients'* with 37 (21%) hotel chefs and 12 (20%) chef lecturers.

4.7 Section 2a – Qualitative findings of descriptor preferences of convenience ingredients in purchasing lists

Overall the key informants preferred *'professional convenience ingredients'* over *'modern professional ingredients'* which corresponds with the quantitative findings in that there was no strong preference. Key informant 1 preferred professional convenience ingredients because:

"I've used them in a professional sense; I also realise they can be used within the household as well, but generally I've used them more for professional cooking in terms of consistency and quality."

When asked the same question key informant 2 preferred *'professional convenience ingredients'* and explained his thoughts:

"I noticed that in your list you've got professional convenience ingredients and then there are the TV adverts with Marco-Pierre White, and more of a professional perspective. I believe he adds a professional perspective, if he's been seen using these products, and adds legitimisation, as far as that's concerned. I think that encapsulates my view towards convenience foods in general."

Key informant 6, an executive chef from a Hilton hotel in Scotland preferred *'modern professional convenience ingredients'* and further explained his reasoning:

"I prefer them because they reflect the products which are in the market which have been brought forward in the last decade or so. It's now becoming a common part of a food order request from some of my staff, so I think it's a

modern convenience ingredient which is put into some of the recipes for professional chef.”

The key informant's comments can be seen in the transcripts in Appendices 7 to 7e.

4.8 Section 3 – Quantitative findings about the general ingredient orientation of chefs

Question 10 looked at and measured the functional and economic attributes of the 'convenience orientation' of hotel chefs and chef lecturers towards the use of convenience ingredients within the kitchen and kitchen classroom in relation to the conceptual model of the chef relationship between convenience ingredient orientation and convenience ingredient use adapted from Candel (2001) in Section 2.4.2. There were no significant differences, however there was data of significance in relation to acceptability and is further addressed within this section and can be seen in the comparative table of findings in Appendix 5. Other preferences from the findings can be seen in Appendices 8 and 8a and the findings are further discussed in Section 5.3.

4.8.1 I prefer using ingredients that are fresh and not previously prepared

The significance of option 10a was that there was almost 100% agreement in both respondents with 167 (99.5%) hotel chefs and 55 (99%) chef lecturers strongly agreeing or agreeing that they preferred using ingredients that were fresh and unprepared. In relation to this research finding, by nature of their type and regardless of functionality convenience ingredients are not the first choice of either of group of respondents.

4.8.2 I prefer using ingredients that are a mixture of fresh and convenience

In option 10b both sets of respondents, 58%, strongly agreed or agreed that they preferred using ingredients that were a mixture of fresh and convenience for recipe

work. The significance of this finding was the equal percentage of preference which was 40% lower than the preference for fresh and unprepared ingredients. Significantly the use of the word 'convenience' may have contributed to the considerable drop in preference.

4.8.3 I prefer using ingredients that are seasonal and local

The significance of the response to option 10c was at the high level and there were almost identical responses between the two groups, with 168 (98%) hotel chefs 54 (95%) chef lecturers strongly agreeing or agreeing in their preference for seasonal and local foods, which may be very closely aligned to the respondent's unanimous preference for fresh and unprepared ingredients as highlighted in option 10a. The acceptance is quite explicit and within that explicitness is the implicitness that convenience ingredients do not deliver seasonal and local solutions to recipe construction.

4.8.4 I prefer using ingredients that are easy to prepare and require less labour

The findings of option 10d show that 67 (40%) hotel chefs and 11 (20%) chef lecturers agreed with this preference, with strong disagreement by 77 (46%) of the professional chefs and 36 (63%) of the chef lecturers. These findings suggest that the reduction of labour alongside easy to prepare ingredients would negatively impact both sets of respondents, but hotel chef attitudes in particular, and are further strengthened in relation to the findings from 4.3.1 and 4.3.2 which were high levels of preference for fresh and unprepared ingredients and ingredients that are a mixture of fresh and convenience.

4.8.5 I prefer using ingredients that improve waste reduction

The findings of option 10e highlighted a 90% level of support of acceptability from both sets of respondents and aligns this functionality with the respondent's high acceptance levels of ingredients that are 'fresh and unprepared' and 'seasonal and local' as found in Sections 4.8.1 and 4.8.3.

4.8.6 I prefer using ingredients that promote labour and food cost reduction

The significance of the general acceptance of 10f is not the 106 (63%) hotel chefs and 33 (59%) chef lecturers supporting this statement, but the higher comparison of response to option 10d about 'ingredients that are easy to prepare and require less labour', which, whilst a different question, held broadly the same inferences for labour and food cost reduction and provides additional reliability and validity to these findings.

4.8.7 I prefer using ingredients that enhance and support food safety

Option 10g referred to fresh ingredients generally whereas in the next section questions on acceptability were specifically linked to convenience ingredients and included a similar question of food safety but with convenience ingredients added. The ultimate outcome was to make a comparison and understand whether the word convenience, when added to 'ingredient', had an effect on the attitude of the respondents towards acceptability of convenience ingredients. Acceptance, unsurprisingly due to the high importance levels and awareness of food safety, was consistently high at 90%, with both sets of respondents strongly agreeing or agreeing, and is also consistent with the high levels of acceptance in Sections 4.8.1, 4.8.3 and 4.8.5 which relate to fresh, seasonal, local and food waste functionalities.

4.8.8 I prefer using ingredients that support environmental sustainability

Agreement to this option 10h was consistently high, with 157 (93%) hotel chefs and 51 (90%) chef lecturers strongly agreeing or agreeing, and is also consistent with the high levels of acceptance of questions in Sections 4.8.1, 4.8.3, 4.8.5 and 4.8.7 reflecting strong social and economic links related to sustainable, fresh, seasonal and local and food waste functionalities.

4.8.9 Q I prefer using branded convenience ingredients of known provenance

Preferences in option 10i, which was looking at branded ingredients with a reputation for quality, were high and consistent between both sets of respondents, with 116 (69%) professional chefs and 37 (66%) chef lecturers strongly agreeing or agreeing that they preferred using branded ingredients of consistent high quality as opposed to unbranded and more economical ingredients of lesser quality. This data suggests that hotel chefs will use branded ingredients that could be either fresh or convenient.

4.8.10 I Prefer using economical convenience ingredients of varying provenance

Preferences in option 10j, which took an opposite position from 4.8.9, were consistent and low with only 14% of hotel chefs and 18% of chef lecturers strongly agreeing or agreeing with the statement. The significance of this data is the importance of brand relationships in relation to 4.8.9 and in particular for food manufacturers and suppliers, as highlighted in the literature review in Section 2.5.4 which suggests brands evolve over time and how the meaning of a brand could 'morph' and its execution could be interpreted in a number of ways by different groupings of consumers.

4.8.11 I prefer using ingredients low in additives such as salt and MSG

Preferences in option 10k for ingredients low in additives such as salt and monosodium glutamate (MSG) were consistent and high, with 113 (67%) hotel chefs and 44 (79%) chef lecturers strongly agreeing or agreeing with the statement.

4.8.12 I prefer using ingredients that are gluten free

The significance of option 10l was the consistent and relatively high level of uncertainty of 70 (42%) hotel chefs and 24 (45%) chef lecturers who were uncertain of their preference for using ingredients that are gluten free, and the consistent level of agreement with only 57 (34%) hotel chefs and 19 (36%) chef lecturers strongly agreeing or agreeing that they preferred using ingredients that are gluten free. Thirty nine (24%) professional chefs and ten (19%) chef lecturers did not prefer to use gluten free ingredients.

The findings indicate a lack of knowledge and understanding of what gluten free ingredients are and further suggest the potential need and requirement for further appropriate training and development of hotel chefs and chef lecturers. These findings have relevance to O'Mahony (2007), in Section 2.5.3, who suggested that hotels have not exploited the healthy approach.

4.9 Section 3 Q10 - Qualitative findings about the general ingredient orientation of chefs

The qualitative findings of Section 3, Q10 are a selection of comments and observations from the key informants that both reflect and correlate with the quantitative findings of hotel chefs and chef lecturer's ingredient preferences and the orientation of Section 3.

4.9.1 I prefer using ingredients that are fresh and not previously prepared

The responses to this option 10a by the key informants were generally supportive of the quantitative findings. Key informant 2 saw the preference and use of fresh and unprepared ingredients as specific to the recipe and specific to the location of the hospitality trade that you are in. Key informant 5 suggested:

“I don’t necessarily agree with that, you can buy a lot of things in [fish] that somebody has already scaled and filleted.”

Filleted fish is of course a form of convenience ingredient but in key informant 5’s quote he was clear in indicating that fresh and frozen fish were both methods of convenience but with different attributes, such as shelf life and preparation times. Key informant 6 agreed that his preference was for using ingredients that were fresh and unprepared, and stated:

“Yes, I would be more inclined to do it that way.”

4.9.2 I prefer using ingredients that are a mixture of fresh and convenience

The responses of the key informants to option 10b were supportive of ingredients that are a mix of fresh and convenient however key informant 4 added the caveat:

“I support this statement but on a quieter week in my kitchen I might not.”

This attitude could be regarded as pragmatic and also implied that a mixture of fresh and convenience ingredients was more acceptable and also correlates with the findings of Section 4.10.1 which revealed a high level of preference for convenience ingredients from both sets of respondents in times of high volume event catering, such as banquets.

4.9.3. I prefer using ingredients that are seasonal and local

Option 10c was not included in the qualitative interviews but was subsequently and retrospectively added to the quantitative questionnaires in that it would provide a comparison opportunity with option 10a about ingredients that 'are fresh and unprepared'.

4.9.4 I prefer using ingredients that are easy to prepare and require less labour

The key informants were generally supportive of this option 10d and key informant 1 advised of his preference for ingredients that 'are easy to prepare and require less labour' by saying:

"That would certainly be the case and it is one of the reasons why we teach convenience products because we can understand about the standardisation of a product and that it can reduce time in the kitchen as well."

Key informant 3 saw it as: *"Acceptable in line with managing costs."*, whereas key informant 6 said: *"Acceptability came with quality."*

4.9.5 I prefer using ingredients that improve waste reduction

Within option 10e waste reduction was not raised specifically in the qualitative interviews but was generally raised within the interview process. When discussing de-skilling Key Informant 2 discussed previous work experience in Claridges, a famous luxury hotel, and the move towards buying ready prepared products saying:

"In order to reduce overall cost the executive chef started to reduce staffing and food wastage costs that are incurred in producing those final products."

4.9.6 I prefer using ingredients that promote labour and food cost reduction

The findings of the key informants in option 10f for ingredients promoting labour and food cost reduction were supportive and in line with the quantitative and qualitative data in Sections 4.10.3 and 4.11.3, which featured convenience ingredient use in

times of economic recession. Key informant 3 was not fully supportive and suggested that:

“In some cases, yes, that would be a good reason to use ingredients that reduce kitchen labour and food costs.”

4.9.7 I prefer using ingredients that enhance and support food safety

In option 10g key informants were not specifically questioned about their attitudes to ingredients and their relation to food safety given that food safety is a key part of their kitchen management role. However Key informant 2 specifically highlighted convenience at basic level one in National Vocational Qualifications (NVQ) by saying:

“The cooking is used as a vehicle for other means, for example, the student is being observed working in the correct manner, both health and safety and hygiene and in that sense ready-made ingredients such as sauces and pasta are incorporated whereas in higher level qualifications that is not necessarily the case.”

4.9.8 I prefer using Ingredients that support environmental sustainability

In option 10h key informant 3 was the only interviewee questioned on sustainability, and agreed by saying: *“Yes and it is becoming more and more relevant for environmental reasons.”*

4.9.9 I prefer using branded convenience ingredients of known provenance

In option 10i the key informants gave short and supportive answers, however Key informant 1, who was also supportive of branded ingredients, took the view that:

“Ingredients should be of consistent high quality yes, but do not have to be of a major brand.”

4.9.10 I prefer using economical convenience ingredients of varying provenance

In option 10j key informants 1 and 3 were the only informants supportive of economical brands with key informant 3 advising that:

“Both branded ingredients and economical branded ingredients are important within the catering operation.”

4.9.11 I prefer using ingredients low in additives such as salt and MSG

All key informants were supportive of option 10k with the exception of Key informant 4 who suggested:

“Salt is not something I would consider when using ingredients as long as the recipe is right.”

Key informant 5 suggested:

“I think if you did a survey you would find people honest enough to say how much salt content is in that.” I do not think they take enough time to think about it overall, but it reflects on the final product.”

4.9.12 I prefer using ingredients that are gluten free

There was no level of uncertainty from the key informants to option 10l as displayed in the quantitative findings. Key Informant 6 was very supportive and suggested:

“I think it has to be an option these days because more and more people’s dietary requirements are hitting every operational restaurant, hospitals, hotels and hotel banqueting, the requirements are tenfold.”

Key informant 2 neither agreed or disagreed and advised:

“My son has coeliac disease which forced me and my wife to carry out a lot of research to find complete food and ingredients to make relevant gluten free products. In that respect, I have developed more dishes for special needs and special diets here at the college.”

4.10 Section 4 Q11 - Quantitative findings of acceptable levels of convenience ingredient use

Question 11 of Section 4 looked at acceptable levels of the use of convenience ingredients with a specific interest in their use between levels of functional and variable acceptability, such as how acceptable the use of convenience ingredients would be for large catering operations such as banquets, or how acceptable would they be for daily routine variables such as chef and skill shortages. There were no significant differences between the respondents; however there was significance in the data with regard to acceptability, with hotel chefs consistently less supportive than chef lecturers of the use of convenience ingredients across all the kitchen functionalities and variables. This question is also discussed further in Section 5.4; a table of comparison of the quantitative findings about convenient ingredient acceptability can be found in Q11 in Appendix 5. The transcripts of the key informants can be found in Appendices 7 to 7e.

4.10.1 The use of convenience ingredients is acceptable for high volume catering

Banquets and events are high volume catering operations where a number of factors such as chef availability, skills and cost may require consideration of the use of a range of convenience related foods and ingredients. The significance of option 11a was the relatively high and consistent level of acceptance by 133 (79%) hotel chefs and 50 (90%) chef lecturers. Acceptability does not confirm actual use which is looked at more closely in the findings of option 12a in 4.12.1 and in the discussion in Section 5.5.

4.10.2 Q11b The use of convenience ingredients is acceptable in times of chef and skills shortages

Option 11b measured the respondent's professional attitude towards the acceptability of convenience ingredients being used during the absence of professional chefs in the kitchen and the subsequent missing skills their absence entails. Acceptance was relatively high, with 108 hotel chefs (64%) and 43 chef lecturers (80%), however the significance of this statement was the relatively high level of non-acceptance among hotel chefs at 48 (28%), further underlining a strong and consistent core of resistance to the use of convenience ingredients.

4.10.3 Q11c The use of convenience ingredients is acceptable in times of recession and economic downturn

Option 11c measured the respondent's professional attitude towards the acceptability of convenience ingredients and their use as a tool to offset economic concerns. Acceptance was consistent and low with hotel chefs at 61 (37%) and chef lecturers 26 (46%). The significance of this statement was the high level of non-acceptance of 68 (41%) hotel chefs compared to 14 (24%) chef lecturers, highlighting a consistent core of resistance among professional chefs to the use of convenience ingredients. These findings also underlined a higher degree of uncertainty, at 38 (23%) of hotel chefs and 16 (29%) of chef lecturers.

4.10.4 The use of convenience ingredients is acceptable when food safety is an issue

Acceptance to option 11d of acceptability was consistent and relatively high with 118 (70%) hotel chefs and 44 (78%) chef lecturers. The significance of this statement was in relation to attitude and variability between 'two foods' as suggested by Sparks *et al.* (1992) in the literature review in Chapter 2.4.3. With the addition of 'convenience' added to the question of ingredients there was a 20% drop in

acceptability from hotel chefs. Looking at ingredients from a fresh and convenience orientation the findings suggest that even when they are supporting food safety a consistent core of 20-30% of hotel chefs are still resistant to the use of convenience ingredients.

4.10.5 The use of convenience ingredients is acceptable when the equivalent fresh are unavailable or too expensive

Acceptance of option 11e was relatively high with 103 (62%) hotel chefs and 40 (72%) chef lecturers saying they would accept the use of convenience ingredients if the equivalent fresh ingredient was unavailable or too expensive. The significance of this statement was the level of non-acceptance, with 19 (27%) of hotel chefs further underlining a consistent core resistance to the use of convenience ingredients of between 20-30%.

4.10.6 The use of convenience ingredients is acceptable as a kitchen back-up for the unexpected

Acceptance of option 11f amongst the both sets of respondents was high but inconsistent, with 106 (63%) hotel chefs as opposed to 46 (82%) chef lecturers. The significance of this statement was again the level of non-acceptance of 46 (27%) of hotel chef's, further underlining their consistent core of resistance, between 20-30%, to convenience ingredient use.

4.10.7 The use of convenience ingredients is acceptable for final recipe flavour enhancement

Acceptance of option 11g on flavour enhancement was consistent and low from 77 (45%) of hotel chefs and 32 (57%) of chef lecturers. The significance of this statement was the level of non-acceptance of 61 (36%) hotel chefs, further underlining their consistent core of resistance to the use of convenience ingredients, of between 20-30%.

4.11 Section 4 Q11 – Qualitative findings of acceptable levels of convenience ingredient use

The comments and observations of the key informants on this question of acceptability have been arranged in correlation with the quantitative findings and the full transcripts can be seen in Appendices 7 and 7a.

4.11.1 The use of convenience ingredients is acceptable for high volume catering

In option 11a the qualitative findings of the key informants reflected the quantitative findings of support. Key informant 3 was no different; however he added a caveat on type and functionality and advised that use was fine but said:

“It depends on what it is and what it’s for.”

Key informant 5, a consultant chef with chef lecturer and five star hotel experiences, found convenient ingredient use acceptable for high volume banqueting and event catering with a number of clear requirement indicators and suggested:

“It’s like everything really. You go back to the labour structure, what are we doing, how many boys have we got in the kitchen, what are we trying to control, is it the same team that is doing the restaurant and the banqueting, how do we need to be clever with this? Professional convenience ingredient use is acceptable for high volume catering; I would say it is acceptable, I wouldn’t say it was highly acceptable. You still need the personal touch of the chef enhancing and embellishing and making it special.”

Key informant 6, an executive chef of a five star Hilton hotel, found the use of convenient ingredients acceptable for high volume banqueting and event catering but saw the importance of a balance between fresh and convenience food and advised that:

“Yeah, there has to be a mixture, there has to be a balance in there. It’s acceptable because it enhances the volume side of it, but it can also be a finisher. It can help finish, enhance the glossiness, the flavour etc. as long as the guys know what they’re doing.”

4.11.2 Q11b The use of convenience ingredients is acceptable in times of chef and skills shortages

In response to option 11b all key informants with the exception of key Informant 3, the culinary chef director of a five star hotel group, accepted the use of convenience ingredients in times of chef and skill shortages and acknowledged this with simple 'yes acceptable' or 'highly acceptable' statements. Key Informant 3 saw the use of convenience ingredients in times of chef and skills shortages as unacceptable and in his words:

"I prefer to find a solution to chef shortages."

Although that solution was not further explored the clear inference was that it was not convenience-oriented.

4.11.3 The use of convenience ingredients is acceptable in times of recession and economic downturn

Option 11c was raised with key informant 4 who said: *"I find this type of use unacceptable, under these conditions, even if the recession and downturn means fewer customers."*

4.11.4 The use of convenience ingredients is acceptable when food safety is an issue

In response to option 11d all key informants found that the use of convenience ingredients as an aid to food safety was acceptable. Key informant 2, a chef lecturer, highlighted that:

"I think this is where the use of bouillon comes into play here. I think yes, it's quite acceptable."

Key informant 5, a chef consultant with chef lecturer and five star hotel experiences was clear and said:

"I would say so, if you were running an operation where something such as food safety was an issue then you would have no option."

Key informant 6, an executive chef of a Hilton hotel, in accepting that convenience ingredients could be an aid to food safety and without being over expansive, said:

“Yeah, I would say that would help it cut out the risk.”

4.11.5 The use of convenience ingredients is acceptable when equivalent fresh are unavailable or too expensive

Option 11e was raised with two key informants. Key informant 3, a chef director of a four and five star hotel group, was thoughtful and said:

“I don’t think that should be a reason to use them. I think you should be menu planning so that you have already thought that through before you do a menu. If you’re in that position where you’ve got something on a menu and you have to compensate with pre-prepared stuff then you haven’t thought through your menu.”

Key informant 4 was less explicit and said *“I find this type of use unacceptable.”*

4.11.6 The use of convenience ingredients is acceptable as a kitchen back-up for the unexpected

There was a general acceptance to option 11f of the acceptability of this type of use with all key informants with the exception of Key informant 4, executive chef for a 5 star De Vere hotel, who saw this type of use as unacceptable.

4.11.7 The use of convenience ingredients is acceptable for final recipe flavour enhancement

In response to option 11g all key informants found the use of convenience ingredients to enhance the final flavour of recipes acceptable with the exception of Key informant 6 who was less than convinced that convenience ingredients were acceptable to use as a final recipe flavour enhancement. His assessment was that:

“Convenience ingredient use does help, it’s acceptable, but it’s not every day.”

Key informant 4 found convenience ingredients acceptable to use as a flavour enhancer and advised:

“Using convenience ingredients to enhance the flavour of freshly prepared recipes is highly acceptable. I tend to use them as an enhancer on a regular basis and I have seen Marco [Pierre-White] on television with his Knorr [bouillon paste], and he puts it onto his steak. We put a fingerful [bouillon paste] into the purees. You’ve chopped the carrots up, half a pound of butter added in there, a fingerful of chicken bouillon paste, cook it in a steamer, and liquidise it, perfect. It’s an enhancer.”

4.12 Section 5 Q12 - Quantitative findings of attitudes and barriers to convenience ingredient use

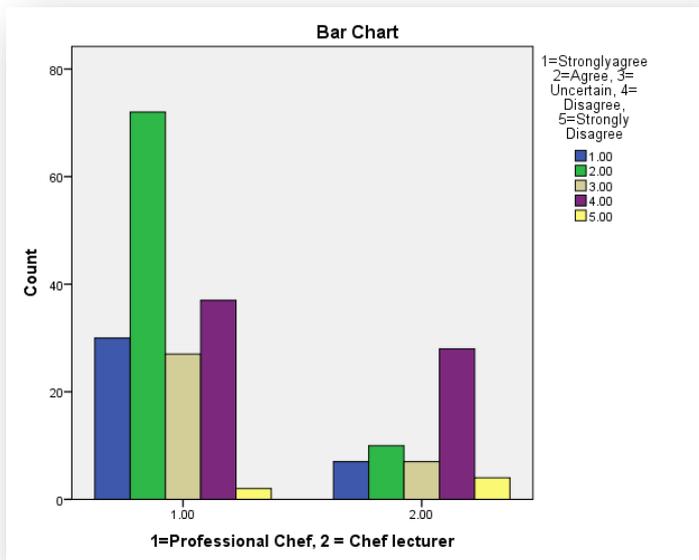
Question 12 of Section 5 of the survey questionnaire looked at the attitudes hotel chefs and chef lecturers towards convenience ingredients and how their kitchen and management culture might influence use and purchase. Barriers towards the use of convenience ingredients such as peer perception, self-perception, de-skilling and the re-skilling of chefs in the kitchen were also explored. Culture within hotels and catering colleges can be seen, from two perspectives, occupational and chef craft, based with fixed practices and organisational management from a more adaptive base. Five of the seven questions raised significant differences that are analysed in this section and further discussed in Section 5.5 from 5.5.1 to 5.5.4.

The chi-squared findings of significance of this section can be seen in Appendix 3, the research data can be seen in Appendix 4, tables of quantitative comparison can be seen in Appendix 5, a summary of quantitative chi-square tests of significance and non-significance can be seen in Appendix 6 and transcripts of the qualitative interviews can be found in Appendices 7 to 7e.

4.12.1 The chef culture is against the use of convenience ingredients

Figure 4.5, of option 12a, based on the chi-squared preference patterns of the respondents suggests that there are differences and these have been further analysed for their significance.

Figure 4.5 Q12a - Chef culture relating to the use of convenient ingredients

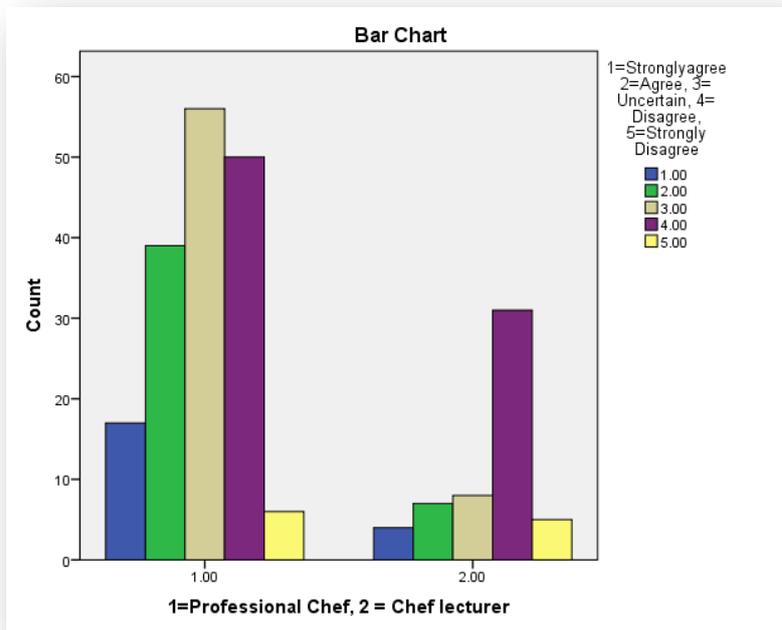


Given the high significance level [Asymp.Sig (2-sided) = 0.000] the H_0 was rejected, and with it the assumption that the variables (hotel and college chef culture compatibility towards convenience ingredient use) are independent. Thus it is reasonable to conclude that the variables are dependent; consequently hotel chefs and chef lecturers have different cultural attitudes to convenience use. There is a significant difference between the two groups of respondents, with 102 (61%) of the hotel chefs more likely to agree that their culture is against convenience ingredients and their use than 17 (31%) of the chef lecturers. Thirty nine (23%) hotel chefs compared to 32 (57%) chef lecturers strongly disagreed or disagreed.

4.12.2 The management culture is against the use of convenience ingredients

Figure 4.6, of option 12b, based on the chi-squared preference patterns of the respondents suggests that there are differences which are further analysed for their significance.

Figure 4.6 Q12b - Management culture relating to the use of convenient ingredients

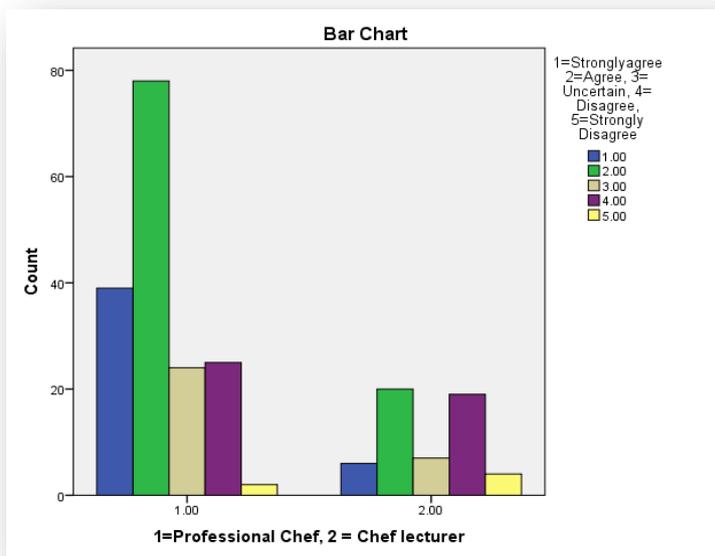


Given the high significance level [Asymp.Sig (2-sided) = 0.001] the H_0 was rejected and with it the assumption that the variables (culture compatible with the use of convenience ingredients) are independent. It is reasonable to conclude that the variables are dependent, and consequently, in the opinion of the respondents, hotel and college management have different cultural attitudes to the use of convenience ingredients. There is a significant difference between the two groups of respondents with 36 (66%) chef lecturers believing their management culture more likely to be supportive of convenience ingredients than 56 (34%) hotel chefs who believe their management culture is supportive. Significantly the hotel chefs were evenly split across the three options with 56 (34%) supportive, (56) 34% against and 56 (33%) uncertain.

4.12.3 Peer attitudes are seen as negative towards chefs using convenience ingredients

Figure 4.7, of option 12c, based on the chi-squared preference patterns of the respondents suggests that there are differences which are further analysed within this section.

Figure 4.7 Q12c - Peer perception relating towards the use of convenient ingredients

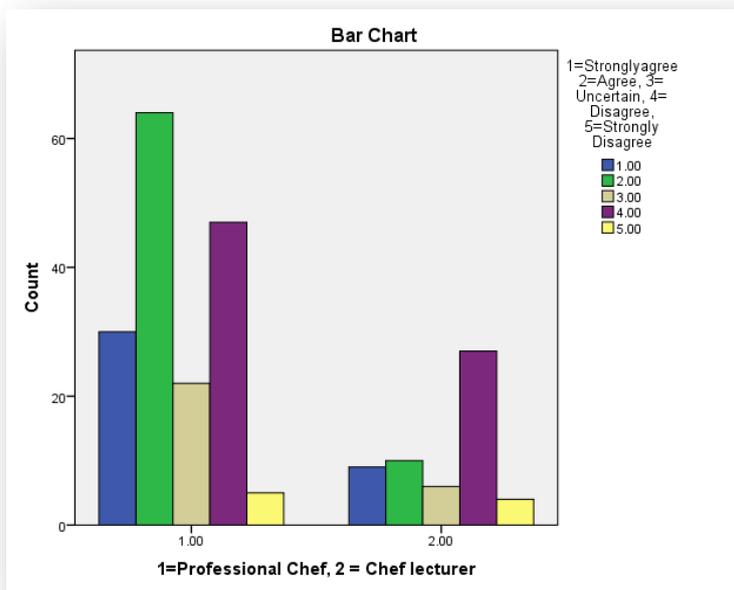


Given the high significance level [Asymp.Sig (2-sided) = 0.001] the H_0 was rejected and with it the assumption that the variables (hotel chefs and chef lecturer peer perceptions) are independent. It is reasonable to conclude that the variables are dependent; consequently hotel chefs and chef lecturers have different attitudes to peer perceptions of convenience use. There is a significant difference between the two groups of respondents, with 117 (70%) hotel chefs more likely to agree that the use of convenience ingredients is seen by their peers as degrading their culinary skills than 26 (46%) chef lecturers. Significantly 23 (41%) chef lecturers as opposed to 27 (16%) hotel chefs disagreed.

4.12.4 The use of convenience ingredients is seen by chefs as a degradation of craft skills

Figure 4.8, of option 12d, based on the chi-squared preference patterns of the respondents suggests that there are significant differences and these are further analysed in this section.

Figure 4.8 Q12d - Self-perception related towards the use of convenient ingredient



Given the high significance level [Asymp.Sig (2-sided) = 0.014] the H_0 was rejected and with it the assumption that the variables (hotel chefs and chef lecturer) are independent. It is reasonable to conclude that the variables are dependent; consequently hotel chefs and chef lecturers have different attitudes to towards convenience ingredient use degrading their culinary skills. There is a significant difference between the two groups of respondents with 94 (56%) of the hotel chefs more likely to agree that convenience ingredient use is seen by themselves as degrading their culinary skills than 19 (34%) chef lecturers. Significantly 52 (5%) chef lecturers as opposed to 52 (31%) hotel chefs disagreed that the use of convenience ingredients was seen by themselves as degrading their culinary skills.

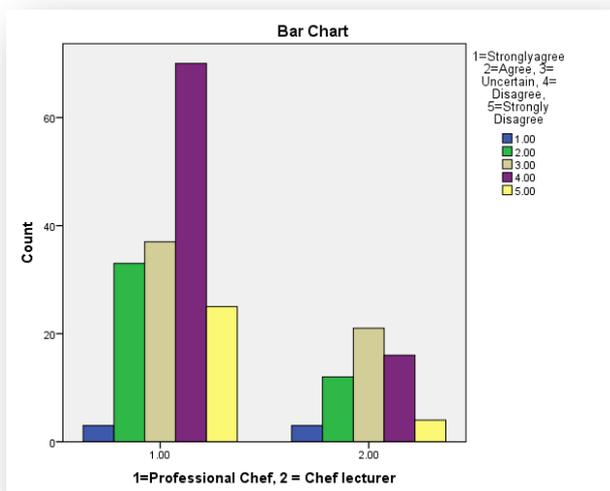
4.12.5 Q12e The use of convenience ingredients supports variety of choice and enhances culinary awareness

In option 12e there was no significant difference between both sets of respondents on convenience ingredients supporting variety of choice with both being supportive, however the significance of the data again highlights the consistent core minority of 20% to 30% of chefs resistant to convenience ingredients and their use. Sixty nine (41%) hotel chefs were supportive with 60 (36%) against. This is in contrast to 33 (62%) chef lecturers in support and 11 (20%) against. 23% of chef lecturers and 10 (19%) professional chefs displayed a relatively high degree of uncertainty.

4.12.6 Q12f The use of convenience ingredients supports the re-skilling and development of professional chefs

Figure 4.9, of option 12f, based on the chi-squared preference patterns of the respondents suggests that there are significant differences which are further analysed in this section.

Figure 4.9 Q12f - Convenience ingredients support re-skilling



Given the high significance level [Asymp.Sig (2-sided) = 0.044] the H_0 was rejected and with it the assumption that the variables (hotel chefs and chef lecturers) are

independent. It is reasonable to conclude that the variables are dependent; consequently hotel chefs and chef lecturers have different attitudes to the use of convenience products being supportive of re-skilling. There is a significant difference between the two groups of respondents with 95 (57%) hotel chefs more likely to disagree that convenience ingredient use is seen as supporting re-skilling than 20 (36%) chef lecturers. Significantly 21 (37.5%) chef lecturers as opposed to 37 (22%) hotel chefs were uncertain.

4.12.7 The use of convenience ingredients influences the de-skilling of professional chefs

There were no significant differences in option 12g however there was significance in relation to this question in that there is consistency, and the majority of both respondents, 107 (64%) hotel chefs and 27 (49%) chef lecturers agreed or strongly agreed that convenience ingredients and their use supports the de-skilling of professional chefs, with 37 (22%) hotel chefs and 17 (30%) chef lecturers disagreeing.

4.13 Section 5 Q12 - Qualitative findings of attitudes and barriers to the use of convenience ingredients

The comments and observations of the key informants attitudes and barriers to this question have been arranged in correlation with the quantitative findings, and the full transcripts can be found in Appendices 7 and 7a.

4.13.1 The chef culture is against the use of convenience ingredients

The general consensus from key informants to option 12a was that there was not a chef culture against convenience ingredients but there were some barriers towards their use. Key informant 1 did not believe there was a chef culture that was against

the use of convenience ingredients within his college but drew attention to a 'stigma by association' and further suggested:

"I think there's a fear factor with this. Generally the college lecturer is not against the use of convenience ingredients, I think that your average chef lecturer understands the use of and is perhaps unconscious of some of their uses, such as marzipan. It's under perception that they are worried about if they teach that commodity as a lesson and the student goes out into industry and the chef says to them "what'd you do at college yesterday?" "I learned how to make convenience stocks." "Oh, what are they teaching you at college these days!" And that's the scenario. That's the issue that I alluded to earlier that we wouldn't necessarily shout about what we're teaching in the curriculum. But if someone's going to ask me the questions, I'm very happy to back it up with the reasons why. I don't think the college lecturer is against it."

Key informant 3, the culinary director of a five star hotel group, thought there may be a culture against convenience ingredients and further explained by saying:

"Sometimes it can be. I wouldn't say it's a culture, I'd say it's the knowledge. The knowledge is lacking. If it's not acceptable, it's because the knowledge is not there"

Key informant 5, an executive chef from a five star Hilton hotel, did not believe there was a culture against convenience ingredients, and although most kitchen bouillon/stock was freshly made he further suggested:

"No. I wouldn't say we were. Yes, we make our own stocks and all that, but you can never make enough."

The suggestion from the last sentence implicitly suggests that convenience stocks are used as appropriate. Key informant 6, the chef consultant with five star hotel and college lecturer experience, did not think the chef culture was against such use but he saw the wording 'against' as a bit strong and further suggested:

"It's a strong word "against." There is a tolerance of use when necessary. You're talking restaurant food here, yeah? So you're talking more a la carte type. Generally I see it, banqueting-wise a different attitude. For restaurant-wise, there's a tolerance to it when necessary. That is fine; I don't think you'd go many places these days without seeing something [convenience ingredients] on somebody's shelf."

4.13.2 12b The management culture is against the use of convenience ingredient

In response to option 12b the key informants took a similar approach to chef culture and generally believed that management culture was not a factor in the use of convenience ingredients. Key informant 4 said very clearly that management culture was not against convenience ingredient use and stated:

“I strongly disagree, they don’t get involved.”

Key informant 6, in line with his comments on chef culture, did not believe that management culture was against convenience ingredients either; however as an executive chef he saw himself not only as a chef but a manager and commented:

“I wouldn’t say they’re against it. Again, it goes back to there being an acceptable level of it [convenience ingredients] I, as a manager, prefer to make fresh stocks and sauces for the restaurant, it’s not really enhanced that way, but there are other things that they’ll [the chefs] maybe use for different finishes and sauces etc. It’s certainly not utilised the way it is for banqueting.”

4.13.3 Peer attitudes are seen as negative towards chefs using convenience ingredients

In response to option 12c key informants did not believe that peers saw the use of convenience ingredients by chefs as degrading their culinary skills, however there was acknowledgements that that some peers may still hold this historical perception.

Key informant 4 in replying strongly disagreed that peer attitudes were against chefs using convenience ingredients however he further advised:

“But it has been a factor! I think there was a stigma attached to it years ago. I remember going to a chefs meeting a long time ago, well, not that long ago, we were having this meeting, discussing bits and pieces and it turned out after this discussion I was the only chef still making mayonnaise. There were a lot of chefs and I was the only chef making mayonnaise. I went away from there and thought; yeah, why the hell am I still making it? From that day on, I started buying it.”

Key informant 5 thought that there were some peers who saw the use of convenience ingredients as degrading culinary skills and had very clear and strong points to make, suggesting that:

“Some of them [peers] don’t live in the modern world. I would say that if you’re not adaptable to the modern chef environment; we’re not talking about a Michelin star restaurant that’s got the ability to charge £200 for a meal and they’ve got all the bodies and they’re producing all the bits, if you look generally at the other 99.99% of the business you have to be flexible and adaptable. You get a lot of people teaching further education who have been teaching for the last 20 years and 20 years ago they did certain things and they haven’t changed their ethos. They haven’t looked at moving on in the industry because they don’t work in the industry any more. They don’t frequent the industry any more. I could do some stuff [cooking using convenience ingredients] and someone from a college could say “that’s a real cowboy trick”, and I’d say “well, taste it.”

4.13.4 The use of convenience ingredients is seen by chefs as a degradation of craft skills

In response to option 12d all key informants were familiar with using convenience ingredients and as such did not see their use, by itself, as detrimental to their status.

4.13.5. The use of convenience ingredients supports variety of choice and enhances culinary awareness

In response to option 12e all key informants agreed that convenience ingredients supported variety of choice and enhanced culinary awareness. Key informant 3 advised:

“Yes. It is. It has a place. It all goes back to the definition of convenience. As soon as you mention the word convenience, people default to extreme examples of convenience, where something is coming in completely prepared and finished and doesn’t deliver as good a quality product as if it was fresh. I’ll give you a couple of examples; I insist that our chefs don’t make their own bread. That, to me, is a convenience, bread is a convenience product. The reason why is because we don’t have the skill, don’t have the equipment, don’t have the technology and now you can buy extremely good quality bread and as long as you manage it right and handle it correctly, it’s more consistent, etc. and I have the same view on petit fours, even pasta.

When asked his opinion of convenience ingredients enhancing culinary awareness

Key informant 4 said:

“Yes, definitely because of the mixture of flavours and bringing the ethnic and American [convenience ingredients] into your kitchen. I’ve got a booking in a couple of weeks’ time where I’m using your recipes from the tube. I’ve just photocopied them and given them to the boys. It’s a big booking, so it’s great, and it’s a fantastic recipe.”

4.13.6 The use of convenience ingredients supports the re-skilling and development of professional chefs

In response to option 12f key informants, with the exception of key informant 2, a chef lecturer, saw both sides to the question of re-skilling, and key Informant 1 reflected this view when asked about de-skilling, and said:

“That’s quite a debatable point. I’d love to be able to use that question for our gastronomic society. I see both sides to this.”

Key informant 2, in agreeing that convenience ingredients aid de-skilling in the kitchen, disagreed that these ingredients could aid re-skilling and said:

“I would tend to disagree with that statement, strongly disagree. Unless you can give me an example, and I can’t visualise an example, I fail to see how that’s going to develop work skills.”

Key informant 3 also saw both sides to this question and saw the need to move with the times:

“Well, that’s where there is an argument. By insisting on guys not making their own bread, you are taking away that skill. I also believe that whilst it is nice to hold onto those traditional basics and know that skill, I believe you have to move with the times. If you don’t move with the times, what we’re saying to guys now is we want you to transfer your skills from making bread into doing other things that will make a point of difference. So the consumer will see that this is something that’s been finished, that there is skill being managed at a local level and the base is lifted. Quality of convenience today is far superior to what it was 10, 15 years ago. The reason why it has a bad reputation is because 10, 15 years ago convenience was a short-cut. Convenience was a third-rate product.”

Key informant 4 was uncertain as were 22% of the hotel chefs in the quantitative findings for the same question on re-skilling. Key informant 5 was unequivocal in his support for convenience ingredients as an aid to re-skilling and said:

“Yes, it does support re-skilling. It does because it’s changed convenience ingredient quality, the world has moved on.”

Key informant 6, when discussing whether the use of convenience ingredients caused de-skilling, believed that an understanding of convenience ingredients helped dispel any thoughts of such de-skilling and when asked about re-skilling on the same subject replied: *“As I said before, if they have an understanding of it, then it shouldn’t do any harm.”*

4.13.7 Q12g The use of convenience ingredients influences the de-skilling of professional chefs

Option 12g, not unexpectedly, was seen differently by the key informants. Key informant 1 saw both sides of the de-skilling and re-skilling debate and when further questioned he said:

“That’s quite a debatable point. I’d love to be able to use that question for our gastronomic society. Every year, the students will sign up to become members of our gastronomic society and we do various business out in the industry and guest lecturers come in. Every now and then we will have a debating society; that’s a fantastic question. I see both sides to this.”

Key informant 2, a chef lecturer, saw convenience ingredients contributing to and causing the de-skilling of hotel chefs and gave two examples:

“Yes, that particular aspect has come up before with some work experience I did at the Ritz, I know the chef really well. When I first went there, there was a butcher and a separate fishmonger, prior to that I was at Claridges as well where they operated the same way. I think there was a move towards buying ready prepared products to a higher specification in order to reduce the staffing costs and also to reduce the wastage that is incurred in producing those final products. To answer the question, yes I think it does de-skill.”

Key informant 3, the culinary chef director of a five star hotel group, saw both sides of the argument about de-skilling but recognised that the use of convenience ingredients could lead to de-skilling, and used an example to say:

“By insisting on guys not making their own bread, you are taking away that skill. I also believe that whilst it is nice to hold onto those traditional basics and know that skill, I believe you have to move with the times...”

Key informant 4, an executive chef, who was supportive of re-skilling, was uncertain that convenience ingredients were a cause of de-skilling and said: *“I agree to an extent but I’m edging more to disagreeing, just slightly.”* Key informant 5, the chef consultant recognised that convenience ingredient use could lead to de-skilling but provided a caveat by saying: *“If you use it (convenience) all the time.”* He further advised:

“Every senior chef’s role is to train and develop their team to try and create awareness of what they’re trying to achieve. If that’s saying we make stock, but we’ve never got enough so we enhance it or whatever, there’s a role there for every senior chef to be able to do that. I think they’re right to do that.”

Key informant 6 in talking about de-skilling said:

“The use of convenience ingredients could lead to de-skilling, but it shouldn’t. Not necessarily. And as I said before, if they (chefs) have an understanding of it, then it shouldn’t do any harm.”

4.14 Section 6a - Q13 Quantitative findings about educational knowledge of convenience ingredients

In line with the other questions of the quantitative research chef lecturers were more supportive of convenience ingredient awareness in Question 13, educational development, with a core of 20% of hotel chefs less supportive. Option 13b was the only question that highlighted a significant difference. The chi-squared findings of significance for this section can be seen in Appendix 3, the research data can be seen in Appendix 4, tables of quantitative comparison can be seen in Appendix 5, a summary of quantitative chi-square tests of significance and non-significance can be

seen in Appendix 6 and transcripts of the qualitative interviews can be found in Appendices 7 to 7e.

4.14.1 General culinary knowledge benefiting from updates and insights into the use of convenience ingredients

Given the high significance level of option 13b [Asymp. Sig (2-sided) = 0.045] the H_0 was rejected and with it the assumption that the variables (hotel chefs and chef lecturers) are independent. It is reasonable to conclude that the variables are dependent: consequently hotel chefs and chef lecturers have different attitudes about the updates and insights of convenience ingredients benefiting culinary knowledge. Both sets of respondents were supportive; however there was a significant difference between the two groups with the chef lecturers (88%) more likely to agree than hotel chefs (67%) that general culinary knowledge would benefit from updates and insights into the use of convenience ingredients. The 21% difference between respondents is consistent with previous sections, highlighting a core 20% to 30% of hotel chefs who are less supportive of convenience ingredients, and is further discussed in Section 5.6, from 5.6.1 to 5.6.3.

4.15 Section 6a – Q13 Qualitative findings of the benefits of educational knowledge on convenience ingredients

Key informants were strongly supportive and in agreement that convenience ingredients and their use should form part of college curriculums, continuous professional development (CPD) and regular updates and insights. This level of agreement, both quantitative and qualitative, by the two sets of respondents separately researched, confers a degree of transferability of the findings of the sample as a whole to the general population of four and five star hotel chefs and college chef lecturers. Key informant 1, in discussing his college's approach to

education and convenience ingredients made it very clear that the college head of department's approach was:

"We make people [students] aware of the alternatives that are being practiced in the industry. One of the things you do with that is expose the students to the industry, which we do for all three of our levels of the professional chef's diploma, for between two to five weeks per year; actually we're increasing that now to between two and ten weeks next year because we see the value in what the industry has to do to play a role in the education. Does that mean we are sending our first year students out to contract catering units, which we do, and they are using convenience products, or if they go into Michelin star restaurants and they are using convenience products? You bet your bottom dollar they do there as well."

Key informant 1 also highlighted his college's approach to current practice in regards to convenience ingredients and their use by stating:

"Curriculums feature convenience ingredients to a certain degree on specific programmes like Level 2 [intermediate] of the Vocational Regional Qualifications (VRQ) and there is quite an emphasis on convenience at Level 1 [foundation] as well but not so much at Level 3, [diploma]. Convenience ingredient use is embedded in it without people [students] recognising it."

In contrast, Key informant 2, a chef lecturer at a London college, described his college's approach to educational knowledge of convenience ingredients as having:

"...not very much credence in that respect; as previously stated it's more a need rather than demonstrating or comparing the differences and further commented I think perhaps there is a conflict between what we're being asked to deliver, between personal values or ethos towards the purity and to what is being expected in reality."

4.15.1 Chef benefits from updates and insights into the use of convenience ingredients

Key informant 2, in responding to the benefits of updates and insights into ingredient knowledge in option 13b was asked:

"Do you believe you have a limited knowledge of convenience ingredients as used today in the industry"?

His reply was:

“In relative terms, no, but I think it could be developed further and I agree that culinary knowledge benefit from regular updates and insights into the use of convenience ingredients.”

Key informant 3 agreed that updates and insight into convenience ingredient use would be of benefit, suggesting that in his early days this had been missing from his culinary education and stated:

“My own personal development and education has forced me to learn more about it, but it’s certainly not something that was part of my own classical traditional training...”

Key informant 4, in agreeing with this statement, said:

“Nobody has ever come into the kitchen to demonstrate to me [how to use convenience ingredients], apart from the recipes that we did for a recent conference, so I do feel I have limited knowledge, in a way, of how to use them correctly and yes would benefit from insight and updates..”

4.16 Section 6 Q14 – Quantitative findings of food manufacturers and suppliers supporting the chef’s professional development

Both sets of respondents were highly and consistently supportive of professional development in support of the use of convenience ingredients through a collaborative approach with business and vocational training providers. There were no significant differences in the six questions of this section and hotel chefs were found to be more supportive than chef lecturers, in contrast to the majority of the research findings, as discussed further in Section 5.6.

4.16.1 Manufacturers and suppliers facilitating the provision of convenience ingredient development

The table of comparison for Question 14 can be seen in Appendix 5 and shows similar acceptance levels for both sets of respondents. 93 (57%) hotel chefs and 39 (70%) chef lecturers were supportive of the online training and development packages of 14a, with 111 (68%) hotel chefs and 35 (62.5%) chef lecturers supportive of the bespoke recipe and menu software packages of 14b. 123 (75.5%)

hotel chefs and 42 (76%) chef lecturers were supportive of the online recipe and menu software packages of 14c. 133 (81%) hotel chefs and 48 (86%) chef lecturers were supportive of the online nutritional/dietary recipe and menu packages of 14d. 81 (49%) hotel chefs and 35 (62.5%) chef lecturers were supportive of the bespoke in-house training courses of 14e and 95 (58%) hotel chefs and 36 (65.5%) chef lecturers favoured closer collaboration with the vocational training bodies of 14f. The data in regard to online nutrition, dietary, recipe and menu packages resonates with O'Mahony (2007) in Section 2.5.3.

The significance of the quantitative findings of this question, as opposed to the previous questions, was the consistently high level of agreement between the two sets of respondents about the need for more collaborative support from food manufacturers and food suppliers. The quantitative findings were further endorsed by the qualitative outcomes and findings from the key informants who were strongly supportive and in agreement of collaborative support from food manufacturers and food suppliers in regard to the professional development of professional chefs.

This level of agreement in both the quantitative and qualitative findings, by the two sets of respondents separately researched, confers a degree of generalisability to the whole population of hotel chefs in four and five star hotels and chef lecturers in catering colleges.

4.17 Qualitative findings of food manufacturers and suppliers facilitating ingredient training and development

Key informants were supportive of manufacturers and suppliers facilitating convenience ingredient training and development for professional chefs. Key Informant 4 was asked his thoughts about whether industry convenience ingredient

suppliers and manufacturers should undertake more training and development of their products through:

- a) bespoke in-house training courses;
- b) training development;
- c) bespoke hardware concept packages;
- d) online recipe and menu software packages;
- e) nutrition healthy diet and menu healthy packages; or
- f) had no specific interest in any external supplier or manufacturer support?

His reply was quite brief and clear and said:

“All of them, apart from the bottom one.”

Key informant 6 was asked:

“Do you think there is sufficient knowledge amongst the generations of chefs on nutrition in general in food; do you think it [nutritional knowledge] is important?”

He replied:

“I think it is very important. I don’t think enough time is taken over it. It is something that maybe could be developed further.”

When Key informant 6 was asked about gluten free he replied:

“I prefer using ingredients that are gluten free and I think it’s got to be an option these days, because more and more people’s dietary requirements are hitting every operation restaurant, hospitals, hotels, banqueting. The requirements are ten-fold.”

4.18 Section 7 - Q15 Quantitative findings of the definition of convenience ingredients

There were no significant differences among the findings within this question, however the overall significance was that a very clear majority of both respondents, with 40 (71%) chef lecturers and 100 (63%) hotel chefs preferring option 15e as the definition best defining convenience ingredients in the modern professional kitchen as:

“Ingredients that meet the culinary aspirations, needs and convenience of the professional chef at the right time and for the right occasion without

compromising consistency and high quality standards of the finished food product served to the customer”

The remaining four definitions received lower levels of, but equally consistent, support from both sets of respondents. The definition is discussed in further detail in Section 5.7 in line with research from Section 2.3 which focused on food as a whole rather than ingredients in particular. The quantitative findings were further endorsed by the qualitative outcomes and findings from the key informants whose preference were broadly supportive.

This level of agreement in both the quantitative and qualitative data, by the two sets of separately researched respondents, confers a degree of transferability of the findings of the sample to the whole population hotel chefs in four and five star hotels and chef lecturers in catering colleges. Tables of quantitative comparison can be found in Appendix 5 and transcripts of the qualitative interviews can be found in Appendices 7 to 7e.

4.19 Section 7 - Q15 Qualitative findings of the definition of convenience ingredients

The qualitative findings of the key informants relate in a similar fashion to those of the quantitative findings, in that a majority saw the definition of option 15e as best defining convenience ingredients in the modern professional kitchen, and this is further discussed in 5.7. Key informant 1 found the definitions of great interest and explained why he chose option 15d.

“Wow, I really do agree with definition d, any fully or partially prepared food ingredient which significant etc., that’s a good one, definition b focuses a little more on labour costs, saving time and money and skill whilst definition e doesn’t mention anything about costs and for me that’s quite an important issue. So I would agree with definition d.”

Key Informant 2 was supportive of option e, the new definition, with the following reasoning:

“I think the last statement was one which encapsulated my views regarding the use of convenience ingredients. Seeing as I have a history of fresh, I think that as we mentioned before there needs to be a balance struck with reduction in time and cost.”

In a further response to the following question he was asked:

“So you’re saying you accept there is a time and a place [for the use of convenience ingredients] providing there is no compromise of consistency?”

his response was:

“Yes, I think the use of convenience needs to be a blend. Whether I was still in the industry or I’m here in a teaching environment, I think there is a need to be able to blend when it’s appropriate and to maintain the qualities stipulated.”

Key informant 3 did not select any of the definition options suggesting that there were a number of different options that could be used and had very strong opinions on defining convenience ingredients which he described:

“I think, in my mind, convenience has a number of different values within the workplace. That value could be to save time, to save energy, to enhance the good product to make it a great product. I think that it has a benefit to all of those things. Depending on where you are looking to use that, some of those will have more value than others. If I give you the two extremes to try and help my definition; Marco-Pierre White said that when he used to make his soups, when he was cooking at three-star Michelin level, he used to enhance his soups with bouillon. That’s the extreme example of where he used to lift a good soup to a great soup.”

On being asked if that extreme level was acceptable key informant 3 continued:

“It is acceptable because if someone can achieve three Michelin stars and be using bouillon, then that, in my mind discounts any illusions of convenience being a third or second rate product. That’s at one end, the other end is that it may be necessary to use convenience, in other types of environment where you do not have the equipment, do not have the skill or do not have the time. My personal view is you should never compromise the end product. What you’ve got to do is take each scenario individually and say “what is the best way of achieving the best product in this environment?” Sometimes that will be using a large portion of convenience, and in some cases it will be using a

small part of convenience, but it will be there to lift and finish a product. That's the way I would do it. I don't know whether there is a definition there that covers that."

Key informant 3, in summarising, said:

"In summary, as a professional chef, you have to open your eyes to convenience and you have to make a business decision, in the interest of the customer and what is going to give them the best quality finished product, of how much of a role convenience plays."

Key informant 5 selected the option 15e, the new definition, and made the following observations and comments:

"I would understand convenience ingredients that are available to the chefs today as those ingredients that meet the culinary needs and convenience of the professional chef at the right time for the right occasion without compromising consistency and high quality standards."

In expanding a little further Key informant 5 explained:

"What option e is saying to me is that I would cut the cost to suit. If I've got a three rosette restaurant then every stock I make has to be a proper stock, reductions and all that sort of stuff. In the same hotel group I've got a wedding on for 150 people; I certainly would want to use a convenience product, I would like to enhance it, and you and I have done it before with red wine and redcurrant jelly and all that stuff and made a cracking sauce. I'm not averse to taking some of that cracking sauce and blending it with my fresh one. I still think that enhances. I would say that definition e plus an element of definition a equals happy chef."

Key informant 6 selected definition e in line with the majority of both the quantitative and qualitative findings and was able to break the definition down in line with his operation, explaining:

"I'm trying to reflect it in the volume of stuff I do here which is predominantly aimed at the banqueting side. It has to consider labour intensive costs but not compromise the final product on the plate. Whether that's for making a stock, sauce or making a soup, etc..."

When asked further if this definition met his aspirations of getting close to fresh without compromise he responded with:

“If it supports the final product, because ultimately, the proof of the pudding is when people taste and eat. That to me is the important thing.”

CHAPTER 5 Discussion of research findings

5.1 Introduction

In this chapter I discuss by critical review the study's main findings from Chapter 4 in line with the findings from the review of the literature, and determine how the respondent's attitudes to the use of convenience ingredients are shaped. The chapter is structured in line with the findings in Section 4.

5.1.1 Years worked in the food and hospitality industry

There were significant differences in the findings, indicating that chef lecturers tend to extend their longevity in the industry compared to the majority of their hotel chef counterparts, and also indicating that chef lecturers will have completed their first ten years in professional kitchens prior to becoming chef lecturers, which suggests that within their role chef lecturers will have had significant industry experience. Chef lecturers were also more active in their roles than hotel chefs for periods of 25 to 35 years, further highlighting differences in longevity at work. When asked if using convenience ingredients was seen by industry peers as degrading culinary skills, Key Informant 5, a chef consultant with considerable chef lecturer experience explained:

"You get a lot of people teaching further education who have been teaching for the last 20 years and 20 years ago they did certain things and they haven't changed their ethos. They haven't looked at moving on in the industry because they don't work in the industry any more. They don't frequent the industry any more. I could do some stuff [recipes] and someone from a college could say that's a real cowboy trick, and I'd say well, taste it."

Key informant 5 appears to be suggesting that chef lecturers with 20 years or more college experience may lack current hotel and restaurant industry experience. This (2009) cautioned against the repeated use of:

"Doing something over and over again for the sake of tradition."

This's quote has some correlation with the thoughts of Key Informant 5 and Pratten and O'Leary (2007), in that chef lecturers with twenty years, or more, college experience may lack experience of current industry practice.

The opinion of Key Informant 5 and the separate research findings, along with those of Pratten and O'Leary (2007) in Section 2.6.1, suggesting that chef lecturers lack experience of current practice, indicate a level of validity in the research.

5.1.2 Years worked at current place of employment

With regard to the number of years in their current employment there were significant differences, with 51% of hotel chefs twice as likely to have worked for up to their first five years in their current employment compared to 27% of chef lecturers, and 39% of chef lecturers twice as likely to have worked for up to their first 10 years in their current employment as opposed to 18.4% of professional chefs.

The findings indicate that chef lecturers may have more stability in their college role in the six to fifteen year period, with hotel chefs having less so. The findings also suggest that chef lecturers and hotel chefs are unlikely to work for twenty years or more in one employment. This may indicate stability linked to senior chefs and lecturers, with the turnover in the early years attributed to that of new entrants moving on through natural progression or for other employment reasons.

5.1.3 Job title description

The description of the job title in Question 3 was of no great significance to the research however one of the findings of the quantitative research indicates that the title of master chef may not be an appropriate title or typology for contemporary hotel chefs. There was no inclusion of master chef in the question about job titles however

each respondent was allowed to offer another title appropriate to their role. Of the 56 (31.5%) hotel chefs who cited another title there was no reference to master chef. These findings are further validated by the findings of the question about typologies, which can be seen with the job titles in the table of comparison in Appendix 5, indicating that only 3% hotel chefs saw themselves as master chefs despite the findings of Question 6 in Section 4.1.6, which indicated that 37% [hotel chefs] were members of the 'Master Chefs of Great Britain' association, and is validated by the findings of Key Informant 3 in 4.3.1 who was not really sure of the meaning of 'master chef' despite having been a member of the 'Master Chefs of Great Britain' himself.

5.1.4 Professional chef qualifications

Both sets of chefs had similar levels of professional development, including NVQs, in-house training and development, and industry-recognised culinary arts certificates. City and Guilds was the dominant awarding body with chef lecturers (86%) and hotel chefs (70.5%) having attained their professional certificates through that awarding organisation. The higher level of City and Guilds and other qualification attainment by chef lecturers which included an MSc in Culinary Arts and a degree in Hospitality Management, may be an indication of and reason for working within an educational background.

5.1.5 Training schemes and additional culinary development

The findings indicate that chef lecturers may, by nature of their college/university role, be required, and are more likely, to undertake formal training schemes to become chef lecturers than their hotel chef counterparts whose findings indicate that they are not necessarily required to undertake additional culinary development to enhance their professional qualifications. The findings of Questions 4 and 5 also

highlight the stronger level of both professional and academic attainment by chef lecturers, with a significant number of hotel chefs (43 or 24%) having not undertaken any additional culinary development to enhance their professional qualifications. The figure of 24% may be connected to the consistent core of 20% to 30% of hotel chefs who, within the research, were found to be resistant to convenience ingredients and their use. However this finding was not tested and cannot be verified.

5.1.6 Membership of professional chef organisations

Membership of professional chefs organisations based on the findings would appear to be more important to hotel chefs than chef lecturers, with over half (56%) of chef lecturers not a member of any professional chef organisation. This had no overall bearing on the research but may suggest that hotel chefs see group identity and culture, as discussed by Cameron (1999), through membership of chef associations as an important part of the hotel chef organisational culture.

5.1.7 Chef typology preferences

The Food Related Lifestyle (FRL) model used for the questionnaire was chef specific and adapted from the consumer food segmentation as suggested by Buckley *et al.* (2005), to reflect types of chefs as discussed by Foskett and Ceserani (2007: 352), describing them as “*tradition oriented chefs*” and suggesting that they had to come to terms with change and:

“Switch over from traditional labour-intensive production to more high quality convenience oriented food bases...”

This resulted in two new segments being added to the adapted FRL model for the typology question, ‘Tradition Oriented’ and ‘Contemporary Oriented’ chefs with the contemporary being the opposite of the traditionalist, as best explained by the philosophical quote from This (2009:5):

“if you are exposed at an early age to new methods then what is traditional for one seems innovative to others and further cautions against repeated use of doing something over and over again for the sake of tradition...”

This's quote references two chef typologies, which can be recognised as 'contemporary' and 'tradition'-oriented. Buckley *et al.* (2005:3) in Section 2.3.1 suggested that the food related lifestyle (FRL) typology grouped consumers of food products from an attitudinal approach such as:

“Purchase, preparation and consumption including quality aspects such as health, freshness and taste with the objective to investigate the degree to which food related lifestyle segments are convenience-oriented.”

The findings of Questions 10 and 11 in Sections 4.3 and 4.4 showed a high and consistent level of preference for fresh ingredients, by both sets of respondents, with aspects such as quality, health and freshness similar to the 'consumer approach' suggested by Buckley *et al.* (2009). Overall the choice for each segment was remarkably consistent, with 60% of both sets of respondents seeing themselves as a mixture of more than one of the six typologies listed, with the closest segment being 'tradition oriented chef' at 12% and 15% respectively. Only option d, showed inconsistency, with only 5% of professional chefs considering themselves as entrepreneurial and no chef lecturers, which may be consistent with a chef lecturer's line of work focusing on culinary training and development and not directly on the business skills required to set up and grow businesses. Only 3% of each of the respondents saw themselves as master chefs, which may indicate that the term may not be relevant in contemporary kitchens.

These findings would suggest that by rejecting individual typologies and selecting a mixture of more than one, the majority of both sets of respondents could be grouped as in favour of convenience ingredients from a multi-dimensional typology approach,

closely connected to the quote of Buckley *et al.* (2005:3) linking the multi-aspirations of the chef to the typology.

All the key informants saw themselves as a mixture of one or more of the typologies highlighted in the questionnaire. Key informants 4 and 6, both executive chefs of large four and five star hotels saw themselves as both tradition- and contemporary-oriented chefs which they saw as a reflection of their classical and traditional culinary training with additional contemporary development. Key Informant 5 saw himself as “a mixture of all” the typologies and further claimed:

“I think the ideal chef is a mix of all of these. I think they have to understand how it can be made from scratch and have to understand what’s out there to allow them to be flexible enough to control it. They have to be entrepreneurial, adventurous, and they have to be cutting edge. I would say that the best of chefs nowadays is somebody that’s got all these attributes but you can apply the appropriate attitude to the right scenario.”

This key informant data correlates with the quantitative data which resonates clearly with the wording of the new definition, discussed in Section 5.1.1. Olsen *et al.* (2006), in Section 2.3, in regard to definitions of convenience, suggested:

“That convenience in relation to food could be related to different stages of the consumption process including planning, acquisition, purchasing, and preparation and cooking and had a role of differing importance dependent on different situational contexts...”

Key informant 5 and his view of an ideal chef, and Olsen *et al.* (2006) and his definition of convenience, could be linked to the new definition of convenience, outlined in 2.3, in that Olsen’s view of convenience linked to different consumption stages and the differing importance of cooking, dependent on different situational contexts such as luxury hotels or staff restaurants, could also be linked to the favoured statement ‘one or more of the above’ which was a phrase used to embrace all the typologies but was not a typology in its own right.

Having considered the quantitative and qualitative data and understanding how the marketing world encapsulates such diversity of chef activity, a new typology linked both to the outcomes of the definition and typologies could be considered. Such a typology suggested is 'The Gyroscopic Chef':

“Typically a chef, with a flexible mind set of aspiration whose skill base can turn freely in one or more directions thereby maintaining orientation regardless of any movement of that skill base to and from the work place.”

In line with Buckley *et al.* (2005) and Cullen and Kingston (2009) who in 2.3.1 advised *“Food typologies are a well-established model for consumer food segmentation”* this segmentation replaces the typology's descriptive statement 'a mixture of one or more of the above' and resonates with the outcomes from both the 'typologies' and 'definition' sections of the survey and provides a platform for different thinking about the role of the professional chef in relation to the use of convenience ingredients at all levels.

5.2 The use of convenience ingredients

The findings from Question 8, whilst strongly indicative of a high level of convenience ingredient use by both sets of respondents, did not confer acceptability of the practice. The findings also suggest varying levels of implicit and explicit acceptability. In Section 2.4.2 Wilson *et al.* (2000), in discussing implicit and explicit attitudes from a dual stance, advised that a same attitude object, for example a convenience ingredient that had more than one use such as mayonnaise could be viewed on or more levels, and further suggested that any differences in or between the attitudes could, by way of explanation, suggest constructs of separate individuality developed through differing procedures and methods of use.

There were only four convenience ingredients out of seventeen that created significant differences between the respondents as outlined in Section 4.2. Those

ingredients were bouillon/stock, jus, reduced fat spread alternatives to butter and dairy cream alternatives to fresh cream, and this was additionally significant in that they represented four key building block ingredients used in a chef's professional kitchen repertoire and that the chef lecturers were 20%-30% more disposed towards their use. That disposition, as Wegner *et al.* (1995) cited by Sparks *et al.* (2001) in 2.4.3 advised, does not take into account the co-existence of positive and negative attitudes and attitudinal ambivalence, which, as seen in one person, indicates whether the hotel chef and chef lecturer hold opposite attitudes towards convenience whilst simultaneously allowing the same attitude to convenience to co-exist. This clearly correlated with the findings from Questions 10 and 11 in Sections 4.3 and 4.4.

In discussing convenience use key informant 1 believes that there is a place in the industry for convenience stock by pointing out his college's view of stock as a convenience item and the importance of students understanding how to make fresh stock, but equally as important to understand how to reconstitute convenience stock. He also highlighted that it was not something they "*particularly shout about*" but is introduced from the beginning and that there is a place for convenience stocks. Key informants 1, and 4, were also aware of an industry stigma in the use of convenience, as highlighted in the qualitative findings of Section 4.5. They suggested the stigma was derived from culinary snobbery, and by implication that fresh is superior, and also that the use of convenience, as discussed by Robinson and Barron (2006) in 2.2.2, supports de-skilling, a view that key informant 1 also saw from both perspectives. That view is reinforced by Cameron *et al.* (1999) who discussed the instruments of organisational profit (de-skilling and standardisation) being at odds with culinary art, and is further discussed in Section 5.5.3.

The qualitative insight from key informant 1 is very much in line with the quantitative data in that it highlights the hotel chef's reluctance to accept convenience ingredients, but also provides a 'perception of reality' and raises questions about the level at which convenience ingredients begin to be accepted. The reflection from Key Informant 1 also supports the quantitative data that highlights the reluctance hotel chefs to accept convenience ingredients and their use. The transcripts about the use of convenience ingredients can be seen in Appendices 7 to 7e.

5.3 Ingredient orientation

The discussion of Question 10 focuses on the functionalities related to ingredients such as food safety that made specific ingredient selection preferable. Subsequent data can be interpreted in a number of ways as being supportive of fresh, convenience or a mixture of both. In discussing the transition from complexity to simplicity of recipe construction in 2.5.1, the suggestion by Craig (2002: 14) is that *"what counts as a whole is not given by nature but depends to some extent on us and our purpose"*, can be related to the dual stance functionality discussed in Section 5.2 is in line with the ingredient orientation options, such as 'I prefer ingredients that are fresh and unprepared' and 'I prefer ingredients that reduce labour and food costs' and can be seen in Section 4.8. The ingredient functionality options listed, with the exception of options 10a and 10c which could be seen as being more explicitly fresh, or as highly improbable that ingredients listed as fresh and unprepared will be convenience ingredients, were selected for their implicit dual functionalities of being applicable to either fresh or convenience, as highlighted in Section 2.4.2.

In discussing his department head's attitude towards convenience use key informant 2 advised:

“That the restriction on time with the students is a factor in how much convenience is used and that in the student learning area, as opposed to the student refectory which uses mainly convenience, ingredient use is a combination of fresh and convenience [a mixture of both] with convenience contributing no more than 25% of the total and the main convenience ingredients being used are for kitchen stocks.”

He did see a pragmatic need to expand on the use of a mixture of both fresh and convenience in relation to current practice. This detail correlates with the views of key informant 1 in that both colleges use a mix of fresh and convenience ingredients within their development, in particular for kitchen stocks, with time and pragmatic considerations playing a significant role.

Options 10a and 10c, which can be seen in Section 4.3, asked both sets of respondents their preference for ‘using ingredients that are fresh and unprepared’ and ‘seasonal and local’. These questions were placed as controlling statements and expected to receive unanimous endorsement which they did, and very clearly categorises fresh and unprepared ingredients, regardless of the variables within their daily kitchen routine, at the top of the hotel chef and college chef lecturer list of ingredient criteria for use and procurement. This also implicitly suggests that hotel chefs and chef lecturers have a reluctance to use ingredients of a convenience oriented nature. That would further suggest a single rather than a dual attitude approach to that type of convenience as discussed in Section 2.4.2.

In analysing the question of ingredient orientation and the key attributes and functionalities that made specific ingredient selection preferable, four areas of ingredient functionality emerged, where respondent orientation was relatively high and consistent: implicit convenience which positions convenience ingredients alongside fresh and implies more acceptability; social responsibility that embraces

ingredients with seasonal and local attributes; waste reduction and food safety functionalities. Whilst it would be difficult to apply seasonal or local functionalities to convenience ingredients, Colman's mustard and Worcester sauce are two examples of convenience ingredients that could be linked to seasonal and local functionalities, Colman's both seasonal from the mustard seed crop and local from Norwich and Worcester being seen as not only local but British. Convenience ingredients of varying degrees of pre-preparedness can also be linked to waste reduction in the kitchen. Ingredients such as mayonnaise, which has been linked to salmonella, and ingredients with less harmful levels of salt and MSG were acceptable to both respondent groups, and this correlates with the high acceptance of fresh and unprepared.

Branded ingredients were seen as highly acceptable, with the implication being that ingredient acceptability could be seen from both a fresh and convenience position or from a dual stance approach as discussed in 2.4.2. For example this could mean that the chef who finds convenience generally unacceptable due to a traditional background may accept the use of convenience ingredients if they knew that the ingredient/s performed consistently and effectively, and if they had other functional attributes such as being low in salt or fat. Economic considerations were also acceptable from a labour reduction and food cost position. Sustainability was seen as highly acceptable within ingredient orientation and again implicitly suggests that ingredient orientation, whether fresh or convenience can be acceptable providing it meets certain criteria of the individual chef or the chef's organisation.

5.3.1 Ingredient functionality within ingredient orientation

There were three areas of ingredient functionality in Question 10, which elicited less favourable respondent ingredient orientation; explicit convenience, economic variance and health variance. Ingredients that '*are easy to prepare and require less physical labour*' are by definition explicitly convenient and were less acceptable to both sets of respondents. Economic variance is illustrated in the preferences toward own label branded ingredients which were less preferable than major branded ingredients, again highlighting attitudes such as those discussed in 2.4.2, and by implication both sets of respondents would be happy to use convenience ingredients that were branded and of good quality. Variance in attitudes to health was illustrated by gluten free preferences which created a uniform high level of uncertainty amongst 42% of hotel chefs and 45% of chef lecturers, and a consistent level of agreement with only 34% hotel chefs and 36% chef lecturers strongly agreeing or agreeing with the statement. The suggestion is that a large percentage of both sets of respondents are lacking in knowledge of ingredients that are gluten free and may well benefit from educational development in this area.

In analysing ingredient use, ambivalence was highlighted in the low preference of 40% of hotel chefs and 20% of chef lecturers for "*ingredients easy to prepare and requiring less physical labour.*" This was in contrast to the high preference of 63% of hotel chefs and 60% chef lecturers for: "*ingredients that reduce labour and food costs.*"

Both statements can be seen from a dual stance as discussed in 2.4.2 however the implicit inference is that the former, "*ingredients easy to prepare and requiring less*

physical labour”, could be perceived by respondents, as being closely and explicitly linked to convenience, whereas the latter, “*ingredients that reduce labour and food costs*” could be linked to convenience but also seen as non-chef labour and non-convenience ingredient types and therefore not so emotional. This is supported by Sparks *et al.* (1992) in Section 2.4.3, arguing that attitudinal ambivalence allows for different attitudes from a variety of informative sources.

5.3.2 Food preferences in relation to cost, waste, environmental sustainability and foods with reduced levels of fat and salt

Analysis of the findings of Question 10 show that chef lecturers and hotel chefs have high preference levels of ingredients that have functionalities linked to fresh and un-prepared food, food safety, food costs and waste, local and seasonal and foods that are lower in fat and additives such as salt and monosodium glutamate (MSG). When similar statements in Question 11 of Section 4.10 were restructured to include convenience ingredients those preference levels were substantially reduced by both sets of respondents.

90% hotel chefs and 89% of chef lecturers preferred using ingredients that support food safety in the kitchen and this is substantiated by option 8k in which both sets of respondents when asked, separately, if they used the convenience ingredient manufactured mayonnaise, confirmed that 86% hotel chefs and 90% of chef lecturers were doing so, which further suggests that this type of convenience ingredient with a functionality linked to food safety is universally acceptable.

In regard to ingredients that supported healthier recipes there was a strong preference for ingredients low in additives, with 67% of hotel chefs and 78% of chef lecturers preferring ingredients low in salt and MSG. Key informant 4 was the only

Informant to prefer low salt when considering convenience ingredients and was more concerned about the recipe *“being right”* which could mean higher or lower levels of salt.

In option 8i, 4.4.3, when asked whether low fat margarine spreads were used as an alternative to butter, 40% hotel chefs indicated they were using them in contrast to 70% of chef lecturers. There may be a connection between these findings that 60% hotel chefs are not using low fat spreads and O’Mahony’s (2007) claim in Section 2.5.3 that: *“hotels have not exploited the healthy approach.”*

Preference for gluten free ingredients was significantly less positive, with 42% hotel chefs and 45% of chef lecturers uncertain. This response elicited the highest degree of uncertainty of all the overall research and suggests that there is a requirement for more educational awareness and development within this area of food health, and the area of allergens within food ingredients, both fresh and convenient. Key informants had a better understanding of the gluten free debate with Key Informant 6 explaining that gluten free recipes:

“...have to be an option these days because more and more regarding people’s dietary requirements are hitting every operational restaurant, hospitals, hotels and hotel banqueting, the requirements are tenfold.”

The findings from Questions 10 and 11 suggest that the use of, or the suggested preference for, the use of convenience ingredients can be affected by explicit or implicit attitudes of an empirical nature as advised by Spence and Townsend (2007) in 2.4.2, which is to suggest that the respondent attitudes towards the use of convenience ingredients can be affected by the observation of others using them or by their own personal experience of use.

The findings also suggest a degree of attitudinal ambivalence as described by Sparks *et al.* (1992) in 2.4.2, an opposite attitude toward convenience ingredients, whilst simultaneously allowing the same attitude to convenience ingredients to co-exist. This is best exemplified by option 10a which suggests *“I prefer using ingredients that are fresh and unprepared”* and option 10b *“I prefer using ingredients that are a mixture of fresh and convenience”* Unsurprisingly the findings for Question 10a saw 100% acceptance by both sets of respondents in contrast to Question 10b which saw preference levels drop to 58% hotel chefs and 59% of chef lecturers. Key informant 5 was the only key informant who did not fully agree and suggested:

“I don’t necessarily agree with that, you can buy a lot of things in [fish] that somebody has already scaled and filleted.”

The findings from this research suggest that chef lecturers and hotel chefs have a strong awareness of level of ingredients in general and convenience ingredients in particular, however there are gaps in that awareness as indicated by the gluten data in 4.8.12 and to a degree by the findings in Question11, which included the words ‘convenience ingredients’ as opposed to Question10 which focused on ‘ingredient awareness’. Those gaps are in healthier food and convenience ingredient awareness in general.

The findings from Question 10 clearly indicate that both sets of respondents are oriented towards *“fresh and unprepared”*, *“local and seasonal”* and *“ingredients that support sustainability”*, which, for example, could be hand harvested scallops which are not over harvested, or rod and line caught fish which are not over fished. Hotel chefs in top end hotel restaurants and chef lecturers in catering colleges are also oriented towards ingredients that have a mix of functionalities consistent with good kitchen management and practice such as food safety. Implicitly this suggests that

chefs would be prepared to purchase and use ingredients of either fresh or convenient orientation that fit those basic criteria. This orientation also suggests that ingredient acceptability is linked to purpose and has very clear associations with Craig (2002:42) who suggested that:

“What counts as a whole is not given by nature but depends to some extent on us and our purpose.”

That purpose, apart from providing the best quality food, can be deflected by the variables of every day kitchen life, such as food being over cooked beyond edibility and presentation, or running out of certain fresh ingredients. In those circumstances and in understanding what could *“count as a whole”*, could, for instance, include damaged or unavailable food being refreshed or replaced by the chef and further awareness and knowledge of modern convenience ingredients and their use which could provide alternative solutions working independently or alongside fresh ingredients and meeting many of the convenience orientation options.

5.4 Acceptable levels of convenience

Question 11 was quite explicit about what constituted acceptable levels of the use of convenience ingredients, whereas Question 10 on ingredient orientation, provided implicit direction towards acceptability. There were no significant differences within Question 11 and with the exceptions of two statements *“in times of recession and economic downturn”* and *“support for final recipe dish enhancement”* there was consistent acceptance from both sets of respondents towards accepting the use of convenience ingredients when considering *“high volume catering”*, *“chef and skill shortages”* *“food safety as an issue”*, *“fresh ingredient availability and cost”* and as *“a kitchen back up for the unexpected.”* These outcomes have further resonance in Craig’s reference to acceptability being linked to purpose, as discussed in 5.3.

Question 11d which suggested convenience ingredient use is acceptable where food safety is an issue, also suggested attitudinal ambivalence from both sets of respondents, with 70% hotel chefs and 78.5% of chef lecturers preferring convenience ingredients where food safety is an issue. This could be, for example, a preference for manufactured mayonnaise as opposed to freshly made egg mayonnaise which has connections with salmonella in eggs.

The high acceptability of convenience ingredients for volume catering needs to be tempered when compared with convenience orientation in Question 10d, *“I prefer to use ingredients that are easy to prepare and require less physical labour”*. Convenience ingredients were less acceptable for hotel chefs and chef lecturers, suggesting a *“professional chef threshold”* of acceptability that some chefs will not go above or below, meaning, for example, that using certain levels of convenience, whether a pre-trussed chicken or a branded curry paste, could be questionable. This is highlighted by Key informant 3 who, whilst accepting convenience ingredient use for volume catering, did so with the caveat:

“Yes depending on what it is and what for.”

Key informant 3 also had similar caveats for the option *“In times of chef shortages?”* and stated:

“I would prefer to find a solution to the chef shortages but not a convenience ingredient one.”

These caveats suggest a dual stance approach as discussed in 2.4.2 and further discussed in Section 5.2. Key Informant 3 also viewed acceptability from an acceptable position for example as a back-up for general food shortages, and the unexpected yet found final recipe enhancement unacceptable. He also used the scenario of bouillon making and found it acceptable to take some convenience

ingredients such as stock/bouillon paste and add it to a sauce at the last minute to enhance flavour rather than make a convenience bouillon from the paste, and also found it acceptable to use these convenience ingredient pastes as an ingredient to flavour and marinade meat protein and vegetable purees. These attitudes towards acceptability also reflect a dual stance approach as discussed in 5.2.

Key Informant 4, also discussing acceptability, represented much of the hotel chef core resistance to convenience ingredient use but was willing to use convenience ingredients according to functionality where ingredient enhancement was not visible. For example that might mean adding a teaspoon of bouillon paste to a sauce to enhance its flavour without the use of convenience ingredients being obvious in the final outcomes to peer curiosity, or consumer consumption.

What became clear within the question of acceptability was a consistent core [20% - 30%] of hotel chefs who, in six out of seven statements, rejected convenience ingredient use. This was a pattern reflected throughout the statistical data for Question ten and implies that the use of convenience ingredients has clear limitations within the attitude of use and acceptability by four and five star hotel chefs. Acceptance was considerably higher from chef lecturers and may reflect the findings in Section 4.2.1 that chef lecturers have around 10 years of industry experience in addition to their educational role and may also have more awareness of current practice, contrary to the suggestion of Pratten and O'Leary' (2007) in Section 2.6.1.

5.5 Attitudes and barriers to the use of convenience ingredients

Question 12 was quite explicit in its reference to convenience ingredients and was broken down and seen from three main variables:

- a) *Culture*
- b) *Perception*
- c) *Variety of choice*

Of the seven questions in this section, five had findings of significant differences. In Section 2.2.1, Cameron *et al.* (1999) discussed chefs in high standard hotels reconciling their peer approved standards alongside organisational and commercial demands, and further highlighted the status and prestige of the hotel restaurant chef and that by definition a chef culture is a group culture centred on cooking but isolated from the place of task activity. Group culture can be explained as a grouping of chefs and their ideals within hotel groups of chefs or in professional chef associations, both of whose core values tend to be centred around 'culinary craft values and professional development', such as the Craft Guild of Chefs or the Royal Academy of Culinary Arts.

The findings of Question 6 on professional chef association membership, in Section 4.2.6, indicated that 100% of the hotel chefs and 44% of chef lecturers are affiliated to seven groupings of professional organisations. There may be a correlation between the high membership and the hotel chef's consistent 20% to 30% core resistance to convenience ingredients as indicated throughout the findings of 4.5, 4.8, 4.10 and 4.12 and to the lower level of membership but higher level of acceptance of convenience ingredients by the chef lecturers.

5.5.1 Chef and management culture influencing the use of convenience ingredients

In analysing the data from Question 12a regarding chef culture linked to the use of convenience ingredients, 61% of professional chefs agree that their culture is less supportive of the use of convenience ingredients, with 23% disagreeing. In contrast 31% of chef lecturers said they were less supportive, with 57% disagreeing. These outcomes clearly confirm the hotel restaurant chef's core resistance to the use of convenience ingredients and the findings from four and five star and luxury hotels have clear links to Wright *et.al* (2001) in Section 2.2 who suggested that tastes in food betray social and cultural origins and suggest that the preferences in food ingredients of four and five star hotel chefs may better reflect the social and cultural context of their working environment, as well as their craft skill and training.

In regard to management culture perceptions and attitudes, the results are again significantly different. A majority of chef lecturers believe their management culture is not against the use of convenience ingredients, with only 20% disagreeing, whereas professional chefs are split evenly across all levels of agreement, disagreement or uncertainty. Uncertainty of management culture, discussed in 2.2.1, may be linked to the hotel chef's dilemma of reconciling peer approved standards with the commercial demands of the hotel, and as such not raising the issue and maybe creating uncertainty, within the hotel chef, of the management's support for the use of convenience ingredients.

The findings on hotel chef management culture are supported by Key informant 4 who advised that his management; "*did not get involved*", and this, in context, suggests they were neither for nor against, and also suggests that management and

chefs, within the hotel restaurant sector, may lack dialogue, including discussion of the use of convenience ingredients. Cameron *et al.* (1999: 232) in discussing: “*reciprocal influence and potential conflicts between organisational and occupational culture*” further examined mutual experience and the need for shared experiences, which if not fulfilled, could lead to managers and chefs “*valuing differential quality*” in different ways. The outcome of this question does not suggest that hotel chefs and managers in four and five star hotels are in conflict but that some experiences may not be shared between the occupational culture (hotel restaurant chef) and the organisational culture (hotel manager).

As reviewed in 2.2.1 there may also be a dilemma for some hotel chefs in reconciling their peer approved standards with the hotel management, the resolution of which would require: “*a degree of mutual equivalence*” and “*a shared perception*” of the food standards they shared. Key informant 6 in 4.13.2 provides, to a degree, an illustration of “*mutual equivalence*” in that he did not see management culture being unsupportive of convenience ingredients but discussed an “*acceptable level*” which would have meant some form of communication in order to avoid conflict between the two cultures as reviewed in Section 2.2.1.

In discussing chef culture in Section 4.13.1, Key informant 3, the culinary chef director of a group of luxury hotels and also part of the hotel’s management group, thought there may sometimes be a culture against convenience ingredients and their use but suggested it was not culture but a lack of knowledge, which is also relevant to the discussion of the “*mutual equivalence*” and “*shared perception*” of both management and hotel chefs.

5.5.2 Perceptions of chefs and industry peers about the use of convenience ingredients

In analysing option 12c of Section 4.5.3 there is a significant difference, with a majority, 69%, hotel restaurant chefs who very strongly agree that the use of convenience ingredients is seen by their peers as degrading. This compares to 46% of their college counterparts who are narrowly split, with 41% disagreeing and having significantly fewer reservations than their hotel restaurant counterparts. Both findings however suggest peer perception is a significant barrier, and clearly affects chef's attitudes to convenience ingredient use. Tradition and ideology, or their different roles, may also have more of an impact on hotel restaurant chefs than on their college chef lecturer counterparts.

In analysing option 12d of Section 4.5.4 there are significant differences in regard to self-perceptions, although not as strong as in the previous variables, with 56% of hotel restaurant chefs agreeing that they themselves view the use of convenience ingredients as degrading culinary skills, whereas 55% of chef lecturers disagree. Self-perception is a significant barrier and clearly affects the chef attitude to the use of convenience ingredients.

5.5.3 The influence of the use of convenience ingredients as a means of supporting the re-skilling and professional development of chefs

In analysing option 12f of 4.12.6 there were significant differences in which hotel chefs (56%) clearly disagreed that the use of convenience ingredients was supportive of the re-skilling of chefs as opposed to 36% of chef lecturers, and once again highlighting a core resistance to the use of convenience ingredients by 20% to

30% hotel restaurant chefs. This stronger resistance has a correlation with Cameron *et al.* (1999) and Lashley (2009) in 2.2.2, stating that:

“Within the four and five star hotel environment re-skilling may be seen by chefs and management as more of a challenge to chef values and tradition.”

Ceserani and Foskett (2007: 75) in Section 2.6.4 recommend that students should:

“Explore markets, get to know both fresh foods and all possible substitutes such as convenience or ready prepared and to make comparison between various brands of foods and between convenience and unprepared foods.”

It was not clear from these findings whether both sets of respondents in general, and the hotel chefs in particular, had at some point in their development been able to follow the Ceserani and Foskett recommendation, or whether this may be more of a challenge for the 24% hotel chefs who, as highlighted in Section 4.2.5, had not undergone any additional culinary development.

5.5.4 The influence of the use of convenience ingredients as a means to influence the de-skilling of chefs in the professional kitchen

In analysing option 12g the majority of both sets of respondents, 64% hotel restaurant chefs and 49% chef lecturers, agreed that convenience ingredient use encourages de-skilling. Key informant 1, who is supportive of convenience ingredients, saw both sides of the statement and additionally saw it as a question that he would like to use within a gastronomic debating society within his college. To a degree that question has been answered from the findings with de-skilling, as reviewed in Section 2.2.2, often seen as the process of standardisation in the contemporary professional kitchen in that technological evolution and application can increase profits and reduce pressure on under-skilled and under-resourced kitchen staff.

Key informant 2 was quite clear that convenience ingredients were a factor within the de-skilling debate of the foodservice, (hotels and hospitality) industry. Four out of the six key informants linked convenience ingredients to de-skilling, with Key informants 1 and 3 seeing both sides of the argument. Highlighting work experience at the Ritz Key Informant 2 said:

“I know the chef really well. When I first went there, there was a butcher and a separate fishmonger, prior to that I was at Claridges as well where they operated the same way. I think there was a move towards buying ready prepared products to a higher specification in order to reduce the staffing costs and also to reduce the wastage that is incurred in producing those final products. To answer the question, yes I think it does de-skill.”

Whilst not specifically discussing convenience ingredients this work experience drew parallels with the industry de-skilling phenomenon in general and can be linked to Cameron *et al.* (1999) in Section 2.2.2 who suggested that:

“De-skilling can be experienced by chefs in four and five star hotels as well as in smaller hotels and can be defined as the standardisation of cooking techniques through centralisation and a lowering of the values and skills of cooking as commercial and organisational pressures conflict with traditional occupational peer approved standards and can also lead to the reduction of chefs in kitchens.”

Key informant 1’s gastronomic debating society observation, in practice, would be an opportunity to debate de-skilling with a panel of ‘tradition oriented’ chefs on one side and student chefs on the other as reviewed in 2.2.2. These students, as suggested by This (2009:5) in 2.6.4, would have been exposed at an early age to new methods, and what is traditional for the tradition oriented chef, could be seen as innovative to the student. That traditional reserve and reluctance to use convenience products could be seen as innovative by the students who rather than seeing repetitiveness may see opportunity and innovation in re-skilling.

The findings of the re-skilling and de-skilling question also highlight a degree of attitudinal ambivalence, in particular of chef lecturers in, in relation to their generally stronger acceptance of the use of convenience ingredients, contrasting with their views on re-skilling and de-skilling, and further supports the discussion of Sparks *et al.* (1992) in Section 2.4.3, allowing for the same attitudes toward convenience ingredients to co-exist in such a way that suggests there are both positive (favourable) and negative (unfavourable) elements in the use of convenience ingredients that could be leveraged to the advantage of the chef. These findings indicate that chef lecturers are generally well disposed towards convenience ingredients and their use but at the same time they are also critical of their role in the re-skilling debate and strongly agree that they are a factor in the de-skilling debate.

5.6 Educational influences on convenience ingredient culinary development

In Section 2.6.2 Taubman (1994) advised of the challenges for those responsible for the continuous professional development (CPD) of chefs, as they progress, and that they should look outwardly at the training, development, courses and curriculum aligned to the industry environment and current, not necessarily best, practices. In drawing comparisons with Taubman those challenges were being met by the approach of the college of Key informant 1, outlined in Section 4.15, who explained:

“We make students aware of the alternatives that are being practiced in the industry. One of the things you do with that is expose the students to the industry, which we do for all three of our levels of the professional chef’s diploma.”

In contrast Key informant 2 saw his college’s approach to educational knowledge of convenience ingredients as having:

“Not very much credence in that respect; as previously stated it’s more a need rather than demonstrating or comparing the differences”

The contrast between the two colleges suggests an inconsistency in approach to the culinary development of students in regard to the educational development of 'current practice'.

Question 12 focused on the personal educational attainments of the respondents and had one significant difference in option 13b which showed that 67% of hotel chefs and 87.5% of chef lecturers agreed that:

“General culinary knowledge would benefit from updates and insight into the use of convenience ingredients.”

22% of hotel chefs were uncertain, in contrast to 5% of chef lecturers. In Question 13a, 84% of chef lecturers and 66% of professional chefs felt they were better prepared to understand and use convenience ingredients through professional culinary development. In option 13b a high level, 88%, of chef lecturers agreed that regular insights and updates into awareness of convenient ingredients would be beneficial, whereas only 66% of professional chefs agreed, with 20% uncertain. In Question 13c, 70% of chef lecturers as opposed to 50% of professional chefs agreed that convenience ingredient awareness should be actively included in curriculums.

The overall significance is the consistent 20% differential between hotel chefs and chef lecturers in their attitude to culinary educational development which correlates with the findings of the previous Sections 4.4, 4.8 and 4.10, in that there is a core of 20% - 30% of hotel chefs who are less supportive of convenience ingredients than chef lecturers.

The higher level of acceptance by chef lecturers correlates with the comments of Key informant 1, in Section 4.15, whose college curriculums feature convenience

ingredients to a certain degree on specific programs such as Level 2 (intermediate) of the Vocational Regional Qualifications (VRQ). Key informant 1 also believes that there is quite an emphasis on convenience at Level 1 (foundation) as well but not so much at Level 3, (diploma) and that the use of convenience ingredients is embedded into the program without people recognising it.

5.6.1 Convenience ingredient training, facilitation of development, and support by food manufacturers and suppliers

Question 14 focused on supplier and manufacturer facilitation of training and development with two key elements, online and collaborative development, receiving strong support. Analysis of these findings shows a high level and consistent support, from both sets of respondents, for manufacturers and suppliers to facilitate more convenience training and development, and is an element of the survey where professional chefs are aligned with their chef lecturer counterparts. There was also strong and consistent support, at a lower level than that of the online support, from both sets of respondents, for collaborative work between food manufacturers and suppliers and vocational training providers, such as City and Guilds, to support the educational development of professional chefs.

5.6.2 Online convenience ingredient training and development

Online audio training and development packages in general are supported by both sets of respondents and when translated into online support for recipe and menu packages there was a substantial level of increased support from 76% of professional chefs and 77% of chef lecturers, and when further questioned to include nutrition, dietary, recipe and menu packages the support of both sets of respondents rose to 81% of hotel chefs and 86% of chef lecturers. These are significant and

consistent findings from both sets of respondents, and reflect the increasing foodservice debate about foods that are high in calories, fat, salt and sugar.

The high level of hotel chefs agreeing that the industry could do more to facilitate nutritional/dietary training lends credence to O'Mahony (2007), in Section 2.5.3, who suggested that hotels have not exploited the healthy approach. O'Mahony does not go into detail regarding the approach, however the findings suggest that hotel chefs and their enthusiasm for nutritional and dietary development could have a key role to play in any future approach. When asked if industry convenience ingredient suppliers and manufacturers should undertake more training and development about their products through bespoke in-house training courses, bespoke hardware concept packages, online recipe and menu software packages, and nutrition healthy diet and menu packages, or whether he had no specific interest in any external manufacturer support, key informant 4 was quite clear and held a view that represented all key informants, saying:

“All of them, apart from the bottom one.”

Key informant 6 also highlighted the importance of nutritional knowledge and awareness amongst all generations of chefs and highlighted the recent uptake of requests for allergen information by customers.

5.6.3 Food manufacturer and supplier role in supporting convenience ingredient training and development with vocational training providers

Analysis of option 14f showed strong and consistent support from both sets of respondents, agreeing that food manufacturers and suppliers and vocational training providers should be more collaborative in facilitating convenience ingredient training and development. These findings are consistent with the agreement for online

support, and indicate an overall willingness by both sets of respondents to build on their educational knowledge and development of convenience ingredients.

Based on the findings from Question 14 there may be an opportunity for food suppliers and manufacturers to support professional chefs in the advance of culinary development, including nutrition and dietary education that could also be undertaken directly or collaboratively with education providers.

5.7 Definition of convenience ingredients

There was no significant difference in the findings from both sets of respondents, which were heavily weighted in favour of the new definition that can be seen in 2.3 and the findings in the table of comparison in Appendix 5. A number of definitions highlighted in Section 2.2, (Buckley *et al.* 2005; Candel 2001, and Pepper 1980), were uncovered and tended to be consumer-oriented, reflecting the multi-dimensional functionality of modern convenience foods. In utilising these definitions within the survey questionnaires, it should be noted that the definitions focused on the functionalities of convenience, such as preparation, saving time and money, and from the household manager to the food processor.

In creating and using a new definition within the questionnaire, specifically based on aspiration rather than functionality, the respondents had a series of definitions from which to reflect on what was closer to their perception of the definition of convenience ingredients. The new definition provided an aspirational, contemporary and multi-dimensional alternative to the functional definitions of 2.3 in understanding whether aspiration, within the sample population, was more acceptable than functionality to the respondents.

Buckley *et al.* (2005), in 2.3, suggested that defining convenience could be seen from a multi-dimensional construct and that boundaries of separation are not fixed. Definition 15e, the new definition, was not only aspirational, but also multi-dimensional, with reference to attributes including needs and convenience, the right time and for the right occasion, without compromising, high quality standards and finished food product. The findings indicate that 72% of chef lecturers and 63% of hotel chefs would agree with Buckley *et al.* (2005) in selecting this new definition. Additionally the aspirational and multi-dimensional aspect of the definition was reflected by Key informant 5 who, in providing an example of a three rosette restaurant said:

“What the definition option [e] is saying to me is that I would cut the cost to suit. If I’ve got a three rosette restaurant then every stock I make has to be a proper stock, reductions and all that sort of stuff. In the same hotel group I’ve got a wedding on for 150 people; I certainly would want to use a convenience product, I would like to enhance it, and you and I have done it before with red wine and redcurrant jelly and all that stuff and made a cracking sauce.”

This quote is in line with Buckley *et al.* (2005) and apart from reflecting the multi - dimensional aspect of an operational hotel kitchen Key informant 5 is suggesting that there are no boundaries of separation within his approach.

5.8 Summary of discussion of the main findings

Question 1, about years worked in food and hospitality, established that there were significant differences with 52% of chef lecturers more active in industry between periods of 25 to 35 years than 30% hotel chefs over the same period. Question 2 on years worked in current employment established that there were significant differences, with 51% of hotel chefs almost twice as likely to have worked for up to their first five years in their current employment compared to 27% of chef lecturers.

Job titles in Question 3 were far more varied amongst hotel chefs and there were no hotel chefs or chef lecturers who considered themselves master chefs. In Questions 4 and 5 chef lecturers were more likely to have a higher level of professional chef qualifications and additional culinary development undertaken to support those qualifications and their job role. Almost a quarter (24%) of hotel chefs had not undergone any additional culinary development.

Question 6, about professional chef membership established that over half of chef lecturers, 56%, were not a member of any professional organisation and as such may suggest that membership is not as important within a college environment. Question 7, about food typologies and how the respondents saw themselves as a certain type of chef, revealed that 60% of both sets of respondents, separately researched, saw themselves as a mix of one or more of the suggested typologies. These findings from the hotel chefs and chef lecturers suggested the creation of a typology suitable to both sets of respondents entitled the 'Gyroscopic Chef' and the enabling of a platform for different thinking about the skilled role of the professional chef in general.

Question 8 on the use of convenience ingredients established a high level of use by both sets of respondents but not necessarily acceptance, which further indicated 'dual stances' in that convenience ingredients could be seen from two or more levels. There were four convenience ingredients with significant differences, bouillon, jus, low fat margarine spreads and dairy cream alternatives, three of which, low fat spreads excluded, are key building blocks in a professional chef's kitchen repertoire of recipe construction.

Question 9, on a suitable categorisation and description for convenience ingredients, saw no clear preference, with hotel chefs preferring “*manufactured convenience ingredients*”, chef lecturers preferring “*pre-prepared convenience ingredients*” and “*modern professional ingredients*” the most consistent and equally preferred descriptor of all.

Question 10 about ingredient orientation researched the respondent’s preference for ingredients in general, with the findings indicating that ‘fresh and unprepared ingredients, with 100% acceptance by both sets of respondents, were the number one preference. The findings also demonstrated that ingredient acceptance was enhanced by functional criteria such as being seasonal and local, supporting food waste, cost, food safety and brand awareness.

Question 11, about acceptable levels of convenience, established a consistent level of acceptance from both sets of respondents with no significant differences. What became clear was that within this question, as in Question 10, between 20% and 30% hotel chefs were more resistant to convenience use than chef lecturers.

Question 12, about attitudes and barriers to convenience, highlighted significant differences in five of the seven questions and clearly indicated that a consistent 20% to 30% of hotel chefs are more resistant to convenience ingredients and their use. This was highlighted in Question 12a, in which 61% of hotel chefs as opposed to 30% of chef lecturers believed that there was a chef culture resistant to the use of convenience ingredients.

Question 13 on educational development saw general agreement on all options with the exception of 13b, in which both sets of respondents agreed that their general culinary knowledge would benefit from insights and updates on convenience ingredients however that agreement from hotel chefs was 21% less than chef lecturers and additionally 20% of hotel chefs were also uncertain. Question 14 on the facilitation of collaborative training and development by food manufacturers and suppliers saw the highest level of agreement between both sets of respondents in all the research questions with no significant differences. Online training and development received the highest level of support, with nutrition, dietary, recipe and menu packages supported by 81% hotel chefs and 86% of chef lecturers.

Question 15, about the definition of convenience ingredients, had no significant differences with a high level of acceptance showing that 72% of chef lecturers and 63% hotel chefs preferred the new aspirational definition composed for the research as opposed to the other more functional-based definitions researched from the literature review of Section 2.3.

5.8.1 Key research findings

The most important findings of the research are as follows:

- a) Chef lecturers and hotel chefs see themselves as multi-skilled and not typecast into a single chef type role.
- b) Hotel chefs are less likely to be supportive of convenience ingredients and their use than chef lecturers.
- c) Fresh and unprepared ingredients were 100% preferred and accepted by both sets of respondents.

- d) Ingredients with multi-functional attributes such as food safety, waste and labour and cost, sustainability and reduced salt were highly acceptable to both sets of respondents
- e) Convenience ingredients were seen by both sets of respondents as a cause of the de-skilling of professional chefs.
- f) A high level of both sets of respondents would like to see more food manufacturer and supplier facilitation of online training and development with nutrition/dietary recipe and menu packages as the top preference.
- g) A new definition, representative of contemporary convenience ingredients, received a high level preference from both sets of respondents.
- h) City & Guilds was the dominant professional training body for both sets of respondents.

CHAPTER 6 - Conclusions and recommendations

6.1 Conclusions from the research questions

Overall this study has revealed a lack of research into the ‘attitudes and behaviours of hotel chefs and chef lecturers towards the use of convenience ingredients’ in four and five star hotel restaurant kitchens and catering colleges throughout the United Kingdom, and reflects both my opinion and the reason for undertaking such research. In this section conclusions are reached within the limitations of the four main research questions answered, and existing knowledge. The aim of the research, as discussed in 1.3 was to:

“Establish core elements of the study through background research and comparative analysis into how attitudes and behaviour towards convenience ingredients use may vary between chefs in hotel restaurant kitchens and chef lecturers in catering college kitchen classrooms.”

This aim has been fulfilled and the conclusions, within the context of the research questions, are answered in the subsequent sections.

6.1.1 First research question: ***“How can contemporary convenience ingredients be best defined and is there a relationship between definition and chef type?”***

The research concludes that convenience ingredients are best defined as:

“Ingredients that meet the culinary aspirations, needs and convenience of the professional chef at the right time and for the right occasion without compromising consistency and standards of the finished food product served to the customer.”

This definition portrays positive, motivational and aspirational perspectives in contrast to the other [four] definitions drawn from the literature review in 2.3, which portrayed a degree of non-emotive functionalities such as ‘fully or partially prepared food’, ‘foods that transfer time and activities of preparation’ or ‘the degree to which a consumer is inclined to save time and money’. There were no significant variations in the research findings, with a significant proportion of hotel chefs (63%) and chef lecturers (72%) preferring the bespoke definition in contrast to the other four selected

definitions from the literature review. The remaining preferences of respondents were relatively evenly disposed towards the remaining four definitions with hotel chefs on average at 9% and chef lecturers at 7%.

There are no comparable studies into convenience ingredient definition by hotel and college chefs and my research findings suggest that hotel chefs and chef lecturers define ingredients best from a perspective that is non-prescriptive and embraces motivational and aspirational features such as “*meet the culinary aspirations*”, “*at the right time and for the right occasion*” and “*without compromising consistency and standards.*” Additionally the research and findings relate to the cultures of the hotel chef and college chef lecturer, and are in line with Candel’s observations in 1.1 which suggested that convenience might be culture specific, and require further research.

The research further concludes that there is a link between convenience ingredient definition and chef type. Both sets of respondents (60%) saw themselves as belonging to one or more of the typologies which included tradition-oriented, contemporary-oriented, master chef, entrepreneurial chef, pragmatic and adventurous chefs, as highlighted in Q7 of the tables of comparison in Appendix 5, and links closely to hotel chefs (63%) and chef lecturers (72%) who prefer the new definition of convenience ingredients. There was no specific chef type within the range of types. In searching Oxford dictionaries Online (2012) and other dictionaries for such a typology that reflected the wording of the new definition I researched the Greek word *gyro* and *gyroscope* which leaned towards the meaning, “*I was seeking*”, and included the phrases, “*turning in any direction*” and “*Greek food.*” From this

research I formulated a set of words and referred to them as the Gyroscopic Chef typology which suggests:

“A chef with a flexible mind set of aspiration whose skill base can turn freely in one or more directions thereby maintaining [ingredient] orientation regardless of any movement of that skill base to and from the work place”

This typology brings together the range of chef types; tradition, contemporary, master, entrepreneurial, pragmatic and adventurous and meets the positive, emotive and aspirational aspects of the definition of convenience ingredients.

6.1.2 Second research question: “What types of convenience ingredients are more acceptable and is acceptability more related to hotel chefs than chef lecturers?”

The findings from this question suggest that there are two types of acceptability, that from a functionality perspective, which includes ingredients that are responsive to food safety, local and seasonal foods, sustainability, food waste and cost control requirements, and that from a situational perspective, which includes ingredients that are responsive to the chef’s requirement for high volume catering solutions such as banqueting and events, in times of chef and skills shortages and as a back-up for the unexpected.

Overall the findings conclude that fresh and unprepared ingredients are the ingredients of choice by both sets of respondents (100%) as confirmed by the findings of Questions 10 and 11 in Sections 4.8 and 4.10. However convenience ingredient acceptability is enhanced by convenience ingredients that meet the dual stance of fresh and convenience attributes and is further validated by the findings of option 10b, with a majority of both sets of respondents agreeing that using a mixture of fresh and convenience ingredients is acceptable and is given further validation by key informants 1 and 2, both senior college lecturers, as discussed in Section 5.3.

This could mean, for example, the addition of a manufactured curry paste at the final stages of a freshly prepared curry, to provide more depth of flavour.

The research also concludes that chef lecturers are more disposed towards convenience ingredients and their use than hotel chefs, and are consistent throughout Questions 8, 10, 11 and 12 in Sections 4.5, 4.8, 4.10 and 4.12, respectively and highlights a core of between 20% and 30% hotel chefs who find convenience ingredients and their use less acceptable. The research further concludes that implicit and explicit attitudes to the use of convenience ingredients, in line with Questions 10 and 11, account for different levels of acceptance across both working environments of the respondents, with chef lecturers more likely to be pre-disposed towards explicit acceptance of the use of convenience ingredients, which, for example, suggests that chef lecturers are more likely to use convenience ingredients openly, in line with current practice and without concern for a number of factors such as peer pressure influencing that use.

Wilson, Lindsay and Schooner, cited in Spence and Townsend (2007:439) in 2.4.2 suggested that; *“an individual may hold two or more attitudes toward the same attitude object.”* The acceptable and unacceptable positions on convenience ingredients by Key informants 3 and 4 in 5.4 suggest that their views of convenience ingredient acceptability are separate constructs and are developed by applying varying ingredient functionalities to specific situations such as using convenience ingredient mayonnaise for food safety. Key informant 3 saw the use of convenience ingredients for high volume catering as acceptable but: *“depending on what the ingredient is and what it is for”* and further stated *“I prefer to find a solution to the*

chef shortages but not a convenience ingredient one.” Key informant 4 had, in line with 20% to 30% hotel chefs within the quantitative research, a resistance to the use of convenience ingredients, however he was prepared to use bouillon paste as an enhancer to final dishes rather than fresh bouillon, stating:

“I tend to use them more as an enhancer on a regular basis so, rather than make up a bouillon from a paste you would add the paste to the finished dishes.”

The findings on acceptability also highlighted explicit and implicit attitudes and dual stances of the respondent’s attitudes towards ingredients in general and towards convenience ingredients in particular, as illustrated by Candel (2001) in Section 2.4.2. This means, for example that convenience ingredients in one instance are seen by the chef from a negative viewpoint such as, ‘they encouraging de-skilling’ whilst at the same time being used as an alternative, for a number of reasons, such as ‘a back-up for the unexpected’, ‘food safety’, ‘unavailability’ or ‘the high cost of fresh ingredient equivalents’. This is validated by the findings of option 10g, in which both sets of respondents are asked their preference for ‘ingredient use’ in regard to ‘*supporting food safety in the kitchen*’ and in option 11d are asked if, ‘*professional convenience ingredient use is acceptable where food safety is an issue*’? A high and consistent response rate of 90%, for 10g indicated that hotel chefs and chef lecturers preferred ingredients that supported food safety. The response rate for option 11d was high, but substantially less acceptable when the word ‘convenience’ was added, with 78% of chef lecturers and 70% hotel chefs agreeing that the use of convenience ingredients is acceptable where food safety is an issue.

The difference in acceptance levels highlights implicit attitudes that makes the selection of ingredients less acceptable when the word ‘convenience’ is attached,

and further suggests that hotel chefs and chef lecturers hold opposite attitudes towards the use of convenience ingredients whilst at the same time allowing those attitudes to convenience ingredient use to co-exist, and allow for their use from time to time as the occasion demands.

6.1.3 Third research question: “*What factors affect the chef’s attitudes and towards convenience ingredient use?*”

The conclusion about this research question is that the main factors affecting chef attitudes in their relationship towards convenient ingredients and their use is peer perception, self-perception and de-skilling. Hotel chef (70%) and chef lecturer (47%) attitudes to the use of convenience ingredients were negatively affected by the perception of their peer’s attitudes towards them, which suggests a reluctance to use convenience ingredients at the cost of being viewed in a negative manner by fellow chefs and managers.

De-skilling, alongside re-skilling, was seen as the most emotive of all the questions answered by hotel chefs and chef lecturers in both the quantitative survey and in my interviews with the key informants, with both sets of findings agreeing that convenience ingredients and their use was a factor in de-skilling. These strong views on convenience ingredients and de-skilling can be linked to a standardisation of cooking processes through centralisation, a lowering of culinary values and cooking skills and a conflict of management (organisational culture) pressures affecting traditional occupational (chef culture) peer approved standards. These attitudes to de-skilling concur with my early practical experience as a craft based chef and latterly in my role as a head of culinary development with a food ingredient manufacturer, requiring me to research and develop background information on the

ingredient preferences of hotel chefs and chef lecturers, and also concurs with the views of Robinson and Barron (2006) and Cameron (1999) in Section 2.2.2.

A majority of hotel chefs perceived their culinary skills to be degraded by the use of convenience ingredients as opposed to a minority of chef lecturers. Of the six key informants none of the four hotel chefs or two college chefs saw themselves as degraded and Key informant 5, a respected hotel chef consultant and previously a chef lecturer, suggested that it was mainly tradition-oriented chefs who held that perception. The findings were provided with further correlation by Key informants 1 and 4 who discussed a stigma attached to the use of convenience in general and convenience ingredient stock paste in particular. Key Informant 1 explained:

“There’s a stigma attached to convenience ingredients, sometimes, in the industry. If I were to sit next to, say, Jason Atherton [a Michelin starred chef] and say we’re using convenience stocks, he might frown a little bit. There is a stigma attached to it and we need to be very careful, every college needs to be careful about what they say and what they get into in terms of what they teach because the industry is very happy to jump on the bandwagon and be culinary snobs.”

Key informant 4 believed there had been a stigma attached to convenience ingredients but *“not any more”* and did not feel the stigma himself. These findings and the significant differences add validity and credibility to the conclusions on acceptability in 6.1.2.

6.1.4 Fourth research question: “Are convenience ingredients educationally accepted as being supportive of trends such as re-skilling, reducing food cost and food waste, supporting sustainability and recipes that are lower in calories, salt and fat?”

This research question was asked to measure and understand any causal relationship between the hotel chef and chef lecturer towards the resistance of four and five star hotel chefs in using convenience ingredients. It was my initial view that chef lecturers were more resistant to the use of convenience ingredients.

This research has not found any evidence to suggest that convenience ingredients are educationally accepted as supportive of trends such as re-skilling, food cost and food waste reduction, sustainability and recipes that are lower in calories, salt and fat, nor did it find any evidence of a causal relationship between chef lecturers and the resistance of around a quarter of hotel chefs to using convenience ingredients. What the research did find, however, was that both hotel chefs and chef lecturers believed that their knowledge and use of convenience ingredients had been enhanced by the inclusion of convenience ingredient awareness in their earlier culinary development and that they both strongly supported collaborative educational and professional development through catering colleges, food manufacturers and educational providers such as City and Guilds. These findings, which can be found at Q13 in the tables of comparison in Appendix 5, suggest that the attitudes of chef lecturers may have been re-shaped since the Pratten and O’Leary [2007] paper in which they stated that chef educators felt that:

“Adapting to the use of pre-prepared foods would not be difficult but was not their role which was to prepare chefs for the hotel and restaurant sector with the use of fresh food”

The research also found, as discussed in 6.1.2, that chef lecturers are more likely to be supportive of the use of convenience ingredients, and is further validated by the findings of option 12g, which can be found in Appendix 5, showing that less than 50% of chef lecturers agree that convenience ingredients are supportive of de-skilling, as opposed to over 60% of hotel chefs who agree strongly. The research did find strong support for online culinary development in general, with both hotel chefs and chef lecturers highly supportive, and this high level of support was extended even further when nutrition and dietary packages were included in the questions. However the research also found that same high level of joint support saying that

convenience ingredients and their use was not supportive of re-skilling. The research findings also indicated that the use of low fat margarine spreads and dairy cream alternatives to fresh cream, both used for cooking and baking, was low by hotel chefs and not only supports the findings of O'Mahony (2007) in 2.5.3 who suggested that hotels have not exploited the healthy approach, but also supports my recent food development and research experience with hotel chefs, both in my development kitchen and in their operational hotel restaurant kitchens.

6.2 Final comments

This investigation confirms the lack of research into the phenomenon of convenience ingredients as used by chefs in the foodservice industry in general, and in four and five star hotels and catering colleges in particular. Its main contribution is that it provides an opportunity to understand and compare the attitudes and relationships of hotel chefs in four and five star hotels and chef lecturers in college and university catering faculties towards convenience ingredients and their use. Candel (2001) suggested that convenience might be culture specific and argued for further research, which this investigation undertook.

Two other contributions are the construction of a new definition and typology. The definition encompasses the concept of convenience ingredients from a foodservice perspective rather than from that of a consumer. The high level of acceptance by both sets of respondents reflects a vision of contemporary, aspirational and emotive language without making direct reference to the functional but uninspiring components of convenience definitions, as highlighted by Harrison (1979) Pepper (1980); Candel (2001); Buckley (2005) and Olsen (2006). Those definitions were included within the survey instrument and received low level acceptance.

The second contribution is the definition of a new type of chef, the gyroscopic chef, which was created as a result of the findings clearly indicating that hotel and college chefs did not see themselves boxed as a specific type, such as that of master chef. This new typology also has clear links to the new definition, and takes inspiration from Buckley et al. (2005: 3) in 2.3.1, which provided a definition articulating an attitudinal and aspirational approach to the convenience-oriented food related lifestyle instrument (FRL). The new definition and typology has potential implications for innovation and culinary development within food manufacturing and academic learning.

6.3 Further research

The findings of the research and the review of literature suggest there is scope for:

- a) Further research and a more comprehensive understanding of the phenomenon of re-skilling [up-skilling] in the hotel sector in particular, and the hospitality industry in general, to include the education and development of convenience ingredients in line with current practice and as necessitated by advances in food manufacturing, kitchen technology and the period of recession 2008 – 2014. This would be of particular benefit to the food manufacturing and educational sectors of the foodservice industry by providing an opportunity to review food development, innovation and educational development from both an academic and vocational perspective.
- b) Research into the relationship between energy, food waste, dietary efficiencies and attributes of modern manufactured convenience ingredients aligned to new kitchen equipment technology. This would be of particular benefit to government, food manufacturing and food equipment sectors of the hospitality industry, the energy sector and the food and hospitality sector in

general, and could provide an opportunity to establish innovative food solutions to reflect current practice and industry trends.

6.4 Recommendations

On the basis of this research and the findings from the research questions, a more in depth assessment of educational attitudes towards the role of modern convenience ingredients in current practice is merited. This would potentially have the benefit of providing academic status to a foodservice phenomenon that is recognised within current practice, and removing a stigma that the research findings uncovered and discussed. It is recommended that:

- a) Food manufacturers, suppliers, universities, college catering faculties and qualification providers should consider joint activity and work closer together on the role of convenience ingredients within current practice of the food service sector, inclusive of four and five star hotels.
- b) Catering colleges and universities, in collaboration with the food manufacturing and supply industry, consider research into the potential benefits and savings of energy, food waste, calories, fat, sugar and salt from the use of modern manufactured convenience ingredients.

The benefits of such collaboration would not only contribute to the raising of educational and skill levels in a crucial part of culinary development but also raise awareness and acknowledge the alternative contribution of convenience ingredients and their use from an educational level, where it is not currently evident. An additional benefit would be in addressing the concerns that chefs have a responsibility towards their consumer's health and wellbeing but lack an understanding of the nutritional and dietary relationship of the ingredients used to construct their recipes which are consumed by their customers, the consumer.

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Appendices

Appendix 1 - Draft questionnaire format

Participation Information Sheet
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My name is Ray Lorimer and I am enrolled as a research student in the London School of Hospitality and Tourism at the University of West London (UWL). The title of my thesis is “Attitudes and behaviours of professional chefs towards the usage of modern professional convenience ingredients”. My project was approved by the UWL Research Degrees Committee in May 2011 and the research conforms to the UWL Research Ethics Code of Practice (downloadable from:

http://www.uwl.ac.uk/research/Research_strategy_and_codes_of_practice.jsp

My research supervisors are Dr Sarah Cullen and Professor Sibel Roller. You are being invited to complete a questionnaire about your attitudes towards convenience ingredients. The questionnaire is anonymous and neither your name nor that of your employer is required. The questionnaire will take about 15 minutes to complete with all data remaining confidential. You may decline participation in this study or withdraw at any time.

There will be a prize draw for all completed questionnaires. The prize is the 6 complete volumes of Modernist Cuisine *the Art and Science of Cooking* by Nathan Myhrvold with ChrisYoung and Maxime Biletlet.

If you have any queries regarding this questionnaire and the survey behind it please contact myself by either email; ray.lorimer@unilever.com or by my mobile phone: 07789 928730.

Thank you for reading this.

Draft Questionnaire

Q1 Professional Convenience Ingredient Usage Survey

Please circle the corresponding numbers to indicate your own answers

Q1a. How long have you worked in the food and hospitality industry?

1-5 years	1
6-10 years	2
11-15 years	3
16-20 years	4
21-25 years	5
25-30 years	6
Other	7

If other please specify

Q1b. How long have you worked at this college?

2 years or less	1
5 years or less	1
7 years or less	3
10 years or less	4
Other	5

If other please specify how long you have worked at this location?

Q1c. How would you best describe your college or hotel in terms of status?

3 star 1

4 star 2

5 star 3

Michelin Star 4

Other 5

If other please describe?

Q1d. How would you describe job title?

Senior Chef Lecturer 1

Chef Lecturer 2

Senior Sous Chef 3

Other 4

If other please describe?

Q 1e. How many chef lecturers work within your college?

1-5 years 1

1-10 years 2

1-15 years 3

Other 4

If other how many?

Q1f. What culinary training scheme did you undertake to become a professional chef?

Full time college apprenticeship	1
Part time college apprenticeship	2
On the job training	3
Other	4

If other what training scheme did you undertake?

Q1g. What training scheme did you undertake to become a chef lecturer?

Teacher training certificate	1
In – house college training	2
Other	3

If other what training scheme did you undertake?

Q1h. What Professional Chef Qualifications have you attained?

City & Guilds Professional Certificates	1
NVQ Certificates	2
In-house training and development certificates	3
Other	4

If other which certificates apply?

Q1i. Have you continued to develop your culinary skills through continuous professional development (CPD)

Yes	1
No	2

If yes which CPD courses have you attained?

Q1j. Have you undertaken any academic courses to further enhance your knowledge of the food and hospitality industry?

Yes 1

No 2

If yes which courses have you attained?

Q1k. Are you a member of any of the following National/International Professional Chef Associations?

a) WACS 1

b) Craft Guild of Chefs 2

c) Master Chefs of Great Britain 3

d) British Culinary Federation 4

e) Welsh National Culinary Association 5

f) Federation of Chefs Scotland 6

g) Panel of Chefs Ireland 7

h) Other/s 8

If other association please describe?

Q1l. Do you believe catering colleges should provide students with more focus and direction related to convenience ingredients as currently practiced in the wider food & hospitality industry?

Yes 1

No 2

If yes or no you may wish to comment why?

Q2. Professional Convenient Ingredient Usage

Below is a list of Professional Convenience Ingredients available for use in professional kitchens. Please indicate if you are using or have used them in your college kitchen classroom by ticking yes / no or not heard of.

	Yes	No	Not heard of
1) Paste Bouillon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Jelly Bouillon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Liquid Bouillon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Powdered/Granule Bouillon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) Paste Jus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Jelly Jus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Liquid Jus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8) Powdered / Granule Jus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9) Paste Gravy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Jelly Gravy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11) Liquid Gravy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12) Powdered/Granule Gravy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13) Indian Curry Sauce Pastes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14) Thai Curry Sauce Pastes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15) Chinese sauce Pastes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16) Oriental/Asian Sauce Pastes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17) North African Sauce Pastes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18) Americas Sauce Pastes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19) European Sauce Pastes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20) Paste marinades for meat, fish or poultry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21) Herb Pastes/Purees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22) White Roux Granules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23) Brown Roux Granules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24) Low Fat Margarine Spreads for Baking/cooking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25) Dairy Cream Alternatives to fresh cream	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26) Mayonnaise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27) Oil based dressings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28) Other - Please specify?			

Q3. Convenience Orientation

Please tick the corresponding box to signify your view

Key 1 = Strongly agree, 2 = slightly agree, 3 = agree, 4 = uncertain, 5 = disagree, 6 = slightly disagree, 7 = strongly disagree

	1	2	3	4	5	6	7
I prefer using ingredients that:							
1. Are easy to prepare	<input type="checkbox"/>						
2. Can be prepared and cooked quickly	<input type="checkbox"/>						
3. Require less physical labour	<input type="checkbox"/>						
4. Require complex culinary skills	<input type="checkbox"/>						
5. Support waste reduction in the kitchen	<input type="checkbox"/>						
6. Are seasonal and local	<input type="checkbox"/>						
7. That are fresh and unprepared	<input type="checkbox"/>						
8. Are a mixture of fresh and convenience	<input type="checkbox"/>						
9. Reduce labour costs in the kitchen	<input type="checkbox"/>						
10. Support food safety in the kitchen	<input type="checkbox"/>						
11. I have no strong preference on the usage of convenience Ingredients in my kitchen/classroom	<input type="checkbox"/>						
12. I would never use convenience ingredients in my kitchen/classroom	<input type="checkbox"/>						
13. I would never allow my students/chefs to use convenience Ingredients in my kitchen/classroom	<input type="checkbox"/>						

Q3a. Do you believe there is a role for modern professional ingredients to be taught/used in the modern hotel kitchen/ college kitchen classroom? Tick preference.

1. Yes
2. No

Q4. Acceptable levels of convenience

Please tick the corresponding box to signify your view

Key 1 = strongly acceptable, 2 = slightly acceptable, 3 = acceptable, 4 = uncertain, 5 = unacceptable, 6 = slightly unacceptable, 7 = strongly unacceptable

	1	2	3	4	5	6	7
Convenience ingredients are acceptable:							
1. for high volume banquet style catering	<input type="checkbox"/>						
2. in times of chef skills shortages	<input type="checkbox"/>						
3. in times of chef shortages	<input type="checkbox"/>						
4. in times of recession	<input type="checkbox"/>						
5. Where food safety is an issue	<input type="checkbox"/>						
6. When fresh equivalents are unavailable or too expensive	<input type="checkbox"/>						
7. when they are used as a back-up for unexpected Food shortages or requests	<input type="checkbox"/>						
8. for the flavour enhancement of freshly prepared recipes	<input type="checkbox"/>						
9. Convenience ingredients are not acceptable in this kitchen/ college kitchen	<input type="checkbox"/>						

Q4. Please add any further comments on ingredient acceptance in this box:

Q5. Attitudes and Barriers to Professional Convenience Ingredient Usage

Please tick the corresponding box to signify your view

Key 1 = Strongly agree, 2 = slightly agree, 3 = agree, 4 = uncertain, 5 = disagree, 6 = slightly disagree, 7 = strongly disagree

	1	2	3	4	5	6	7
1. My culinary development has not prepared me to understand and use professional convenience ingredients	<input type="checkbox"/>						
2. The hotel/chef lecturer culture is against convenience Ingredient usage	<input type="checkbox"/>						
3. The hotel/college management culture is against convenience Ingredient usage	<input type="checkbox"/>						
4. Using professional convenience ingredients would be seen by my peers as degrading my culinary craft skills	<input type="checkbox"/>						
5. Using professional convenience ingredients would be seen by myself as degrading both mine and my students/chefs culinary craft skills	<input type="checkbox"/>						
6. Professional convenience ingredients are currently used Within this hotel kitchen/ college kitchen classroom	<input type="checkbox"/>						
7. Professional convenience ingredients are supportive of additional recipe ideas	<input type="checkbox"/>						
8. Professional convenience ingredients are supportive of variety of choice	<input type="checkbox"/>						
8. Professional convenience ingredients are supportive of chef/student culinary awareness	<input type="checkbox"/>						
9. Professional convenience ingredients are supportive of the re-skilling of the chef in the professional kitchen	<input type="checkbox"/>						
10. Professional convenience ingredients encourages the de-skilling of professional chef's	<input type="checkbox"/>						

Q5. Please add any further comments in this box:

Q6. Attitudes and Barriers to Professional Convenience Ingredient Usage

Please tick the corresponding box to signify your view

Key 1 = strongly agree, 2 = slightly agree, 3 = agree, 4 = uncertain, 5 = disagree, 6 = slightly disagree, 7 = strongly disagree

	1	2	3	4	5	6	7
1. I have limited knowledge of professional convenience ingredients	<input type="checkbox"/>						
2. I have extended knowledge of professional convenience Ingredients	<input type="checkbox"/>						
3. My culinary knowledge and awareness would benefit from an update and insight into the usage of professional convenience ingredients through an accredited continuous professional development scheme (CPD)	<input type="checkbox"/>						
4. Professional convenience ingredient knowledge / awareness should form part of awarding bodies (City & Guilds) and catering college professional cookery courses and curriculums	<input type="checkbox"/>						
5. Do you believe catering colleges should provide students? with more focus and direction related to convenience ingredients as currently practiced in the wider food & hospitality industry?	<input type="checkbox"/>						

Q6. Please add any further comments on knowledge in this box:

Q7. One of many consumer definitions of Convenience foods used is “*any fully or partially prepared food in which significant preparation time, culinary skills, or energy inputs have been transferred from the home kitchen to the food processor and distributor*”

“In relation to cookery in the professional kitchen how would you define convenience ingredients?”

Thank you for completing this questionnaire

Please return either by email to:

ray.lorimer@unilever.com

or by return of post in the stamped address envelope (sae)

Appendix 2

Hotel chef questionnaire with responses and percentages

Convenience Ingredient Usage: Professional  SurveyMonkey
 Chef Survey

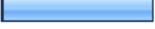
1. How many years have you worked in the food and hospitality industry?			
		Response Percent	Response Count
a) 1-5		2.8%	5
b) 6-10		6.1%	11
c) 11-15		10.0%	18
d) 16-20		18.9%	34
e) 21-25		16.7%	30
f) 25-30		17.2%	31
g) 30-35		12.8%	23
h) 35 years plus		15.6%	28
answered question			180
skipped question			0

2. How many years have you worked at this hotel/restaurant?			
		Response Percent	Response Count
a) 1-5 years		50.8%	91
b) 6-10 years		18.4%	33
c) 11-15 years		11.2%	20
d) 16-20 years		6.7%	12
e) 21-25 years		5.0%	9
f) 25-30 years		4.5%	8
g) 30-35 years		1.7%	3
h) 35 years plus		1.7%	3
answered question			179
skipped question			1

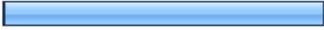
3. How would you describe your job title?

		Response Percent	Response Count
a) Executive Head Chef		38.2%	68
b) Executive Chef		20.8%	37
c) Corporate Executive Chef		2.2%	4
d) Senior Sous Chef		7.3%	13
e) Other (please specify)		31.5%	56
		answered question	178
		skipped question	2

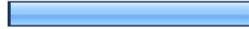
4. What professional chef qualifications have you attained? (one or more answers may be applicable)

		Response Percent	Response Count
a) City & Guilds Professional Certificates		70.5%	124
b) Industry recognised NVQs		27.3%	48
c) Industry recognised in house training & development		32.4%	57
d) Industry recognised Culinary Arts Certificates		25.0%	44
e) Other (please specify)		16.5%	29
		answered question	176
		skipped question	4

5. What additional culinary development have you undertaken to enhance your professional qualifications

		Response Percent	Response Count
a) Work experience/courses at Internationally acclaimed cookery schools/restaurants		59.9%	106
b) Further culinary education e.g. Food & Hospitality Degree or Culinary Arts equivalent		28.8%	51
c) None		24.3%	43
d) Other (please specify)		9.0%	16
		answered question	177
		skipped question	3

6. Are you a member of any of the following National/International Professional Chef Associations? (more than one response may be appropriate)

		Response Percent	Response Count
a) Craft Guild of Chefs		44.5%	49
b) Master Chefs of Great Britain		37.3%	41
c) British Culinary Federation		16.4%	18
d) Welsh National Culinary Association		5.5%	6
e) Federation of Chefs Scotland		13.6%	15
f) Panel of Chefs Ireland		3.6%	4
g) Other (please specify)		43.6%	48
		answered question	110
		skipped question	70

7. Generally speaking from the typologies below how best would you describe yourself as a chef?

		Response Percent	Response Count
a) Tradition oriented chef		12.2%	22
b) Contemporary oriented chef		10.0%	18
c) Master chef		3.3%	6
d) Entrepreneurial chef		5.0%	9
e) Pragmatic chef		1.1%	2
f) Adventurous chef		7.2%	13
g) Mixture of one or more of the above		60.0%	108
h) Other (please specify)		1.1%	2
		answered question	180
		skipped question	0

8. Below is a generic, but not exhaustive, list of Convenience Ingredients available for use in professional kitchens. Please indicate whether you use them in your kitchen by ticking 'used' or not 'used'. If you have no knowledge of these ingredients please tick 'not known'.

	Used	Not used	Not known	Rating Average	Response Count
a) Paste, Liquid,Powder,Granule Bouillon/Stock/Fond Base	72.3% (125)	27.7% (48)	0.0% (0)	1.28	173
b) Paste, Liquid,Powder,Granule Jus Base	52.6% (91)	46.2% (80)	1.2% (2)	1.49	173
c) Paste, Liquid,Powder,Granule Gravy Base	43.6% (75)	55.8% (96)	0.6% (1)	1.57	172
d) White or Brown Roux Granules	8.5% (14)	87.8% (144)	3.7% (6)	1.95	164
e) Indian, Oriental, Asian Pastes for Sauces and Marinades	72.8% (126)	27.2% (47)	0.0% (0)	1.27	173
f) North African, Americas Pastes for Sauces and Marinades	42.4% (72)	55.3% (94)	2.4% (4)	1.60	170
g) European Pastes for Sauces and Marinades	40.2% (68)	58.6% (99)	1.2% (2)	1.61	169
h) Herb Pastes/Purees	42.4% (70)	56.4% (93)	1.2% (2)	1.59	165
i) Low Fat Margarine Spreads for baking and cooking as alternatives to butter	39.8% (68)	60.2% (103)	0.0% (0)	1.60	171
j) Dairy Cream Alternatives to fresh cream	24.0% (40)	74.3% (124)	1.8% (3)	1.78	167
k) Mayonnaise or oil based dressings	85.1% (148)	14.9% (26)	0.0% (0)	1.15	174
l) Powdered Vegetable Gelling Agent Texturisers	52.9% (90)	44.7% (76)	2.4% (4)	1.49	170
m) Dessert fruit pastes and powders	56.7% (97)	41.5% (71)	1.8% (3)	1.45	171
n) Dairy Pastes	13.8% (23)	79.0% (132)	7.2% (12)	1.93	167
o) Nut Pastes	59.4% (104)	40.0% (70)	0.6% (1)	1.41	175
p) Alcohol Pastes	21.0% (35)	70.1% (117)	9.0% (15)	1.88	167
r) Other (Please list any other ingredients, which you use, that you believe to be professional convenience ingredients and are not listed in the above:)					12
			answered question		177
			skipped question		3

9. What statement do you believe best represents the ingredients listed in the previous question, Q8?

		Response Percent	Response Count
a) Pre-prepared convenience food ingredients		10.2%	18
b) Pre-prepared convenience ingredients		14.1%	25
c) Pre-prepared food ingredients of convenience		9.6%	17
d) Professional convenience ingredients		20.3%	36
e) Modern professional convenience ingredients		20.9%	37
f) Manufactured Convenience Ingredients		22.0%	39
g) Branded Convenience Ingredients		2.8%	5
	h) Other, can you describe?		3
		answered question	177
		skipped question	3

10. Please tick the appropriate circle of each statement to complete this question. I prefer using ingredients that:

	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	Rating Average	Response Count
a) Are fresh and unprepared	70.8% (119)	28.6% (48)	0.6% (1)	0.0% (0)	0.0% (0)	1.30	168
b) Are a mixture of fresh and convenience	12.9% (22)	45.3% (77)	14.7% (25)	21.8% (37)	5.3% (9)	2.61	170
c) Are seasonal and local	74.9% (128)	23.4% (40)	1.2% (2)	0.0% (0)	0.6% (1)	1.28	171
d) Are easy to prepare and require less physical labour	11.4% (19)	28.7% (48)	13.8% (23)	35.3% (59)	10.8% (18)	3.05	167
e) Support waste reduction in the kitchen	52.0% (89)	35.7% (61)	7.6% (13)	4.7% (8)	0.0% (0)	1.65	171
f) Reduce labour and food costs	27.4% (46)	35.7% (60)	15.5% (26)	17.3% (29)	4.2% (7)	2.35	168
g) Support food safety in the kitchen	56.5% (95)	33.3% (56)	9.5% (16)	0.6% (1)	0.0% (0)	1.54	168
h) Support sustainability	58.0% (98)	34.9% (59)	4.7% (8)	2.4% (4)	0.0% (0)	1.51	169
i) Are branded and of consistent high quality	25.6% (43)	43.5% (73)	17.3% (29)	11.9% (20)	1.8% (3)	2.21	168
j) Are of economical brands but may vary in quality	4.8% (8)	9.0% (15)	16.8% (28)	38.9% (65)	30.5% (51)	3.81	167
k) Are low in additives such as salt and MSG (umami)	30.2% (51)	36.7% (62)	17.2% (29)	8.3% (14)	7.7% (13)	2.27	169
l) Are gluten free	7.2% (12)	27.1% (45)	42.2% (70)	16.9% (28)	6.6% (11)	2.89	166
m) Please add any other preferences in this box							3
						answered question	173
						skipped question	7

11. Please tick the appropriate circle of each statement to complete this question. Convenience ingredients usage is acceptable:

	Highly Acceptable	Acceptable	Uncertain	Unacceptable	Highly unacceptable	Rating Average
a) For high volume banquet/event catering usage	19.5% (33)	59.2% (100)	8.9% (15)	8.3% (14)	4.1% (7)	2.18
b) In times of chef and skills shortages	8.9% (15)	55.0% (93)	7.7% (13)	23.7% (40)	4.7% (8)	2.60
c) In times of recession/economic downturn	1.8% (3)	34.7% (58)	22.8% (38)	34.1% (57)	6.6% (11)	3.05
d) Where food safety is an issue	21.3% (36)	48.5% (82)	11.8% (20)	13.0% (22)	5.3% (9)	2.33
e) When equivalent fresh ingredients are unavailable or too expensive	7.7% (13)	53.6% (90)	11.3% (19)	20.8% (35)	6.5% (11)	2.65
f) As a kitchen back up for the unexpected	12.5% (21)	50.6% (85)	9.5% (16)	20.2% (34)	7.1% (12)	2.55
g) For final recipe / dish flavour enhancement	8.3% (14)	37.3% (63)	18.3% (31)	22.5% (38)	13.6% (23)	2.95

h) Other (Please add any further preferences on ingredient acceptance in this box)

answered question
skipped question

12. Please tick the appropriate circle of each statement to signify both yours and your workplace attitude towards the usage of convenience ingredients

	Strongly agree	Agree	Uncertain	Disagree disagree	Strongly disagree	Rating Average	Response Count
a) The hotel/restaurant chef culture is against convenience ingredients usage.	17.9% (30)	42.9% (72)	16.1% (27)	22.0% (37)	1.2% (2)	2.46	168
b) The hotel/restaurant management culture is against convenience ingredients usage.	10.1% (17)	23.2% (39)	33.3% (56)	29.8% (50)	3.6% (6)	2.93	168
c) Convenience ingredients usage is seen, by my peers, as degrading culinary craft skills.	23.2% (39)	46.4% (78)	14.3% (24)	14.9% (25)	1.2% (2)	2.24	168
d) Convenience ingredients are seen, by myself, as degrading culinary craft skills.	17.9% (30)	38.1% (64)	13.1% (22)	28.0% (47)	3.0% (5)	2.60	168
e) Convenience ingredients usage supports variety of choice and enhances general culinary awareness.	4.2% (7)	36.9% (62)	23.2% (39)	26.8% (45)	8.9% (15)	2.99	168
f) Convenience ingredients usage supports the re-skilling and professional development of professional chefs.	1.8% (3)	19.6% (33)	22.0% (37)	41.7% (70)	14.9% (25)	3.48	168
g) Convenience ingredients usage encourages the de-skilling of professional chefs.	19.6% (33)	44.0% (74)	14.3% (24)	19.0% (32)	3.0% (5)	2.42	168
answered question							168
skipped question							12

13. Please tick each statement as appropriate to rate your level of agreement

	Strongly Agree	Agree	Uncertain	Disagree	Strongly disagree	Rating Average	Response Count
a) My professional culinary development has prepared me to understand and use convenience ingredients	15.2% (25)	51.5% (85)	8.5% (14)	19.4% (32)	5.5% (9)	2.48	165
b) General culinary knowledge would benefit from updates and insight into the usage of convenience ingredients	13.3% (22)	53.9% (89)	19.4% (32)	10.3% (17)	3.0% (5)	2.36	165
c) Convenience ingredient knowledge / awareness should form part of a chef's continuous professional development (CPD)	15.9% (26)	52.4% (86)	14.0% (23)	15.2% (25)	2.4% (4)	2.36	164
d) Convenience ingredient awareness should form part of catering college professional cookery curriculums and courses	13.9% (23)	36.4% (60)	21.2% (35)	18.8% (31)	9.7% (16)	2.74	165
e) Other (please add any further comments)							11
					answered question		165
					skipped question		15

14. Please tick the appropriate circle of each statement to complete this question. Do you believe food industry ingredient manufacturers and suppliers should facilitate more training and development methods of their convenience ingredients through:

	Yes	No	Unsure	Rating Average	Response Count
a) On line audio training & development packages?	56.7% (93)	26.8% (44)	16.5% (27)	1.60	164
b) Bespoke recipe and menu hardware concept packages?	67.7% (111)	20.7% (34)	11.6% (19)	1.44	164
c) On line recipe and menu software packages?	75.5% (123)	17.2% (28)	7.4% (12)	1.32	163
d) On line nutritional/dietary, recipe and menu packages?	81.1% (133)	11.6% (19)	7.3% (12)	1.26	164
e) Bespoke in-house training courses?	49.4% (81)	32.9% (54)	17.7% (29)	1.68	164
f) Closer collaboration with vocational training providing bodies such as City & Guilds?	58.3% (95)	23.3% (38)	18.4% (30)	1.60	163
			g) Other (please specify)		4
			answered question		165
			skipped question		15

15. What definition do you believe best defines convenience ingredients available for use in the modern professional kitchen? (tick one circle only)

	Tick preferred definition	Response Count
a) Those that transfer the time and activities of preparation from the professional chef to the food processor	100.0% (13)	13
b) Those that professional chefs are inclined to agree save on time, money, skill and labour costs in regard to meal preparation	100.0% (24)	24
c) Ingredients processed to an advanced stage of preparation in order to save time, skill, labour and equipment	100.0% (15)	15
d) Any fully or partially prepared food ingredient in which significant preparation time, culinary skills, or energy inputs have been transferred from the professional chef to the food manufacturer and distributor	100.0% (21)	21
e) Ingredients that meet the culinary aspirations, needs and convenience of the professional chef at the right time and for the right occasion without compromising consistency and high quality standards of the finished food product served to the customer	100.0% (100)	100
	f) Other definition (please specify)	6
answered question		159
skipped question		21

Appendix 2 a

Chef lecturer questionnaire with responses and percentages

Convenience Ingredient Usage: Chef Lecturer  SurveyMonkey Survey

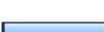
1. How many years have you worked in the food and hospitality industry?			
		Response Percent	Response Count
a) 1-5		0.0%	0
b) 6-10		0.0%	0
c) 11-15		4.5%	3
d) 16-20		9.0%	6
e) 21-25		13.4%	9
f) 25-30		20.9%	14
g) 30-35		31.3%	21
h) 35 years plus		20.9%	14
answered question			67
skipped question			0

2. How many years have you worked at this college?			
		Response Percent	Response Count
a) 1-5 years		26.6%	17
b) 6-10 years		39.1%	25
c) 11-15 years		17.2%	11
d) 16-20 years		7.8%	5
e) 21-25 years		4.7%	3
f) 25-30 years		1.6%	1
g) 30-35 years		1.6%	1
h) 35 years plus		1.6%	1
answered question			64
skipped question			3

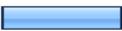
4. What professional chef qualifications have you attained?(one or more answers may be applicable)

		Response Percent	Response Count
a) City & Guilds Professional Certificates		86.4%	57
b) Industry recognised NVQs		28.8%	19
c) Industry recognised in house training & development		36.4%	24
d) Industry recognised Culinary Arts Certificates		28.8%	19
e) Other (please specify)		27.3%	18
		answered question	66
		skipped question	1

5. What training scheme/s did you undertake to become a lecturer in Food & Hospitality? (One or more answers may be applicable)

		Response Percent	Response Count
a) Assessor award		90.9%	60
b) Verifier award		66.7%	44
c) C&G Teaching in FE Certificate		57.6%	38
d) Post grad Cert of Edn (PGCE)		50.0%	33
e) MA in education		3.0%	2
f) Other (please specify)		18.2%	12
		answered question	66
		skipped question	1

6. Are you a member of any of the following National/International Professional Chef Associations? (more than one response may be appropriate)

		Response Percent	Response Count
a) Craft Guild of Chefs		23.4%	15
b) Master Chefs of Great Britain		6.3%	4
c) British Culinary Federation		7.8%	5
d) Welsh National Culinary Association		4.7%	3
e) Federation of Chefs Scotland		3.1%	2
f) Panel of Chefs Ireland		0.0%	0
g) None		56.3%	36
h) Other (please specify)		23.4%	15
answered question			64
skipped question			3

7. Generally speaking from the typologies below, how best would you describe yourself as a chef?

		Response Percent	Response Count
a) Tradition oriented chef		14.9%	10
b) Contemporary oriented chef		10.4%	7
c) Master chef		3.0%	2
d) Entrepreneurial chef		0.0%	0
e) Pragmatic chef		3.0%	2
f) Adventurous chef		4.5%	3
g) Mixture of one or more of the above		59.7%	40
h) Other (please specify)		4.5%	3
answered question			67
skipped question			0

8. Below is a generic, but not exhaustive, list of Convenience Ingredients available for use in professional kitchens. Please indicate whether you use them in your college by ticking 'used' or 'not used'. If you have no knowledge of these ingredients please tick not known.

	Used	Not used	Not known	Rating Average	Response Count
a) Paste, Liquid, Powder, Granule Bouillon/Stock/Fond Base	93.3% (56)	6.7% (4)	0.0% (0)	1.07	60
b) Paste, Liquid, Powder, Granule, Jus Base	74.6% (44)	25.4% (15)	0.0% (0)	1.25	59
c) Paste, Liquid, Powder, Granule Gravy Base	48.2% (27)	50.0% (28)	1.8% (1)	1.54	56
d) White or Brown Roux Granules	1.9% (1)	92.6% (50)	5.6% (3)	2.04	54
e) Indian, Oriental, Asian Pastes for Sauces and Marinades	75.9% (44)	22.4% (13)	1.7% (1)	1.26	58
f) North African, Americas Pastes for Sauces and Marinades	30.9% (17)	69.1% (38)	0.0% (0)	1.69	55
g) European Pastes for Sauces and Marinades	36.4% (20)	63.6% (35)	0.0% (0)	1.64	55
h) Herb Pastes/Purees	37.5% (21)	62.5% (35)	0.0% (0)	1.63	56
i) Low Fat Margarine Spreads for baking and cooking as alternatives to butter	70.2% (40)	28.1% (16)	1.8% (1)	1.32	57
j) Dairy Cream Alternatives to fresh cream	52.6% (30)	43.9% (25)	3.5% (2)	1.51	57
k) Mayonnaise or oil based dressings	89.7% (52)	10.3% (6)	0.0% (0)	1.10	58
l) Powdered Vegetable Gelling Agent Texturisers	51.8% (29)	48.2% (27)	0.0% (0)	1.48	56
m) Dessert Fruit Pastes and Powders	42.9% (24)	57.1% (32)	0.0% (0)	1.57	56
n) Dairy Pastes	17.0% (9)	75.5% (40)	7.5% (4)	1.91	53
o) Nut Pastes	48.1% (25)	50.0% (26)	1.9% (1)	1.54	52
p) Alcohol Pastes	9.6% (5)	78.8% (41)	11.5% (6)	2.02	52
r) Other (Please list any other ingredients, which you use, that you believe to be professional convenience ingredients and are not listed in the above:)					4
answered question					60
skipped question					7

9. What statement do you believe best represents the ingredients listed in the previous question, Q8?

		Response Percent	Response Count
a) Pre-prepared convenience food ingredients		15.0%	9
b) Pre-prepared convenience ingredients		25.0%	15
c) Pre-prepared food ingredients of convenience		8.3%	5
d) Professional convenience ingredients		13.3%	8
e) Modern professional convenience ingredients		20.0%	12
f) Manufactured convenience ingredients		15.0%	9
g) Branded convenience ingredients		3.3%	2
	h) If other, can you describe?		0
	answered question		60
	skipped question		7

10. Please tick the appropriate circle of each statement to complete this question. I prefer using ingredients that:

	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	Rating Average	Response Count
a) Are fresh and unprepared	78.6% (44)	19.6% (11)	0.0% (0)	0.0% (0)	1.8% (1)	1.27	56
b) Are a mixture of fresh and convenience	13.2% (7)	45.3% (24)	18.9% (10)	20.8% (11)	1.9% (1)	2.53	53
c) Are seasonal and local	71.9% (41)	22.8% (13)	1.8% (1)	1.8% (1)	1.8% (1)	1.39	57
d) Are easy to prepare and require less physical labour	5.5% (3)	14.5% (8)	14.5% (8)	54.5% (30)	10.9% (6)	3.51	55
e) Support waste reduction in the kitchen	56.1% (32)	35.1% (20)	3.5% (2)	5.3% (3)	0.0% (0)	1.58	57
f) Reduce labour and food costs	26.8% (15)	32.1% (18)	19.6% (11)	16.1% (9)	5.4% (3)	2.41	56
g) Support food safety in the kitchen	61.8% (34)	27.3% (15)	5.5% (3)	3.6% (2)	1.8% (1)	1.56	55
h) Support sustainability	64.9% (37)	24.6% (14)	7.0% (4)	1.8% (1)	1.8% (1)	1.51	57
i) Are branded and of consistent high quality	32.1% (18)	33.9% (19)	23.2% (13)	8.9% (5)	1.8% (1)	2.14	56
j) Are of economical brands but may vary in quality	7.3% (4)	10.9% (6)	23.6% (13)	40.0% (22)	18.2% (10)	3.51	55
k) Are low in additives such as salt and MSG (umami)	42.9% (24)	35.7% (20)	14.3% (8)	3.6% (2)	3.6% (2)	1.89	56
l) Are gluten free	11.3% (6)	24.5% (13)	45.3% (24)	17.0% (9)	1.9% (1)	2.74	53
m) Please add any other preferences in this box							0
answered question							57
skipped question							10

11. Please tick the appropriate circle of each statement to complete this question. Professional convenience ingredients usage is acceptable:

	Highly acceptable	Acceptable	Uncertain	Unacceptable	Highly unacceptable	Rating Average
a) For high volume Banquet/Event catering usage	23.2% (13)	66.1% (37)	5.4% (3)	5.4% (3)	0.0% (0)	1.93
b) In times of chef and skills shortages	16.7% (9)	63.0% (34)	9.3% (5)	11.1% (6)	0.0% (0)	2.15
c) In times of recession/economic downturn	7.1% (4)	39.3% (22)	28.6% (16)	23.2% (13)	1.8% (1)	2.73
d) Where food safety is an issue	19.6% (11)	58.9% (33)	10.7% (6)	8.9% (5)	1.8% (1)	2.14
e) When equivalent fresh ingredients are unavailable or too expensive	17.9% (10)	53.6% (30)	12.5% (7)	12.5% (7)	3.6% (2)	2.30
f) As a kitchen back up for the unexpected	17.9% (10)	64.3% (36)	8.9% (5)	7.1% (4)	1.8% (1)	2.11
g) For final recipe/dish flavour enhancement	8.9% (5)	48.2% (27)	19.6% (11)	17.9% (10)	5.4% (3)	2.63

h) Other (Please add any further preferences on ingredient acceptance in this box)

answered question
skipped question

12. Please tick the appropriate circle of each statement to signify both yours and your workplace attitude towards convenience ingredients usage

	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	Rating Average	Response Count
a) The college chef lecturer culture is against convenience ingredients usage.	12.5% (7)	17.9% (10)	12.5% (7)	50.0% (28)	7.1% (4)	3.21	56
b) The college management culture is against convenience ingredients usage.	7.3% (4)	12.7% (7)	14.5% (8)	56.4% (31)	9.1% (5)	3.47	55
c) Convenience ingredients usage is seen, by my peers, as degrading culinary craft skills.	10.7% (6)	35.7% (20)	12.5% (7)	33.9% (19)	7.1% (4)	2.91	56
d) Convenience ingredients usage is seen, by myself, as degrading culinary craft skills.	16.1% (9)	17.9% (10)	10.7% (6)	48.2% (27)	7.1% (4)	3.13	56
e) Convenience ingredients usage supports variety of choice and enhances general culinary awareness.	5.6% (3)	55.6% (30)	18.5% (10)	13.0% (7)	7.4% (4)	2.61	54
f) Convenience ingredients usage supports the re-skilling and professional development of professional chefs.	5.4% (3)	21.4% (12)	37.5% (21)	28.6% (16)	7.1% (4)	3.11	56
g) Convenience ingredients usage encourages the de-skilling of professional chefs.	19.6% (11)	28.6% (16)	21.4% (12)	26.8% (15)	3.6% (2)	2.66	56
					answered question		57
					skipped question		10

13. Please tick each statement as appropriate to rate your level of agreement

	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	Rating Average	Response Count
a) My professional culinary development has prepared me to understand and use convenience ingredients	20.0% (11)	63.6% (35)	5.5% (3)	9.1% (5)	1.8% (1)	2.09	55
b) General culinary knowledge would benefit from updates and insight into the usage of convenience ingredients	12.5% (7)	75.0% (42)	5.4% (3)	5.4% (3)	1.8% (1)	2.09	56
c) Convenience ingredient knowledge/awareness should form part of a chefs continuous professional development (CPD)	16.1% (9)	58.9% (33)	19.6% (11)	5.4% (3)	0.0% (0)	2.14	56
d) Convenience ingredient awareness should form part catering college professional cookery curriculums and courses.	14.3% (8)	55.4% (31)	16.1% (9)	7.1% (4)	7.1% (4)	2.38	56
e) Other (please add any further comments)							5
answered question							56
skipped question							11

14. Do you believe industry convenience ingredient manufacturers and suppliers should facilitate more convenience training and development methods of their ingredients through:

	Yes	No	Unsure	Rating Average	Response Count
a) On line audio Training & Development Packages?	69.6% (39)	21.4% (12)	8.9% (5)	1.39	56
b) Bespoke recipe and menu hardware concept packages?	62.5% (35)	21.4% (12)	16.1% (9)	1.54	56
c) On line recipe and menu software packages?	76.4% (42)	16.4% (9)	7.3% (4)	1.31	55
d) On line nutritional/dietary, recipe and menu packages?	85.7% (48)	8.9% (5)	5.4% (3)	1.20	56
e) Bespoke in-house training courses?	62.5% (35)	23.2% (13)	14.3% (8)	1.52	56
f) Closer collaboration with vocational training providing bodies such as City & Guilds?	65.5% (36)	20.0% (11)	14.5% (8)	1.49	55
			g) Other (please specify)		0
			answered question		56
			skipped question		11

15. What definition do you believe best defines convenience ingredients available for use in the professional kitchen? (Tick one circle only)

	Preferred definition	Response Count
a) Those that transfer the time and activities of preparation from the professional chef to the food processor	100.0% (4)	4
b) Those that professional chefs are inclined to agree save on time, money, skill and labour costs in regard to meal preparation	100.0% (5)	5
c) Ingredients processed to an advanced stage of preparation in order to save time, skill, labour and equipment	100.0% (4)	4
d) Any fully or partially prepared food ingredient in which significant preparation time, culinary skills, or energy inputs have been transferred from the professional chef to the food manufacturer and distributor	100.0% (3)	3
e) Those ingredients that meet the culinary aspirations, needs and convenience of the professional chef at the right time and for the right occasion without compromising consistency and high quality standards of the finished food product served to the customer	100.0% (40)	40
	f) Other definition (please specify)	1
	answered question	56
	skipped question	11

Appendix 3

Chi-squared tables of count and significant difference

Cross tabulation of Q 1

Years Worked in the Food and Hospitality Industry?		1=1-5, 2=6-10, 3=11-15, 4=16-20, 5=21-25, 6=26-30, 7 = 31-35, 8 =35plus								Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	
1=Professional Chef	Count	5	11	18	34	30	31	23	28	180
	Expected Count	3.6	8.0	15.3	29.1	28.4	32.8	32.1	30.6	180.0
2 = Chef Lecturer	Count	0	0	3	6	9	14	21	14	67
	Expected Count	1.4	3.0	5.7	10.9	10.6	12.2	11.9	11.4	67.0
Total	Count	5	11	21	40	39	45	44	42	247
	Expected Count	5.0	11.0	21.0	40.0	39.0	45.0	44.0	42.0	247.0

Chi-Square Tests Q1

Years Worked in the Food and Hospitality Industry?	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.633^a	7	.003
Likelihood Ratio	25.395	7	.001
Linear-by-Linear Association	16.452	1	.000
N of Valid Cases	247		

3 cells (18.8%) have expected count less than 5. Minimum expected count is 1.36.

3b Years in current employment

Cross tabulation of Q2

How many years have you worked in your current employment		1=1-5, 2=6-10, 3=11-15, 4=16-20, 5=21-25, 6=26-30, 7 = 31-35, 8 =35plus								Total
		1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	
1=Professional Chef	Count	91	33	20	12	9	8	3	3	179
	Expected Count	79.6	42.7	22.8	12.5	8.8	6.6	2.9	2.9	179.0
2 = Chef Lecturer	Count	17	25	11	5	3	1	1	1	64
	Expected Count	28.4	15.3	8.2	4.5	3.2	2.4	1.1	1.1	64.0
Total	Count	108	58	31	17	12	9	4	4	243
	Expected Count	108.0	58.0	31.0	17.0	12.0	9.0	4.0	4.0	243.0

Chi-Square Tests Q2

How many years have you worked in your current employment	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.168^a	7	.016
Likelihood Ratio	17.180	7	.016
Linear-by-Linear Association	.580	1	.446
N of Valid Cases	243		

7 cells (43.8%) have expected count less than 5. Minimum expected count is 1.05

Cross tabulation of Q7

Q7. Generally speaking from the typologies below, how best would you describe yourself as a chef			1 Traditional, 2 Contemporary, 3 Master, 4 Entrepreneurial, 5 Pragmatic, 6 Adventurous, 7 Mixture of all, 8 Other								Total
			1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	
1= Professional Chef	1.00	Count	22	18	6	9	2	13	108	2	180
		Expected Count	23.3	18.2	5.8	6.6	2.9	11.7	107.9	3.6	180.0
2 = Chef Lecturer	2.00	Count	10	7	2	0	2	3	40	3	67
		Expected Count	8.7	6.8	2.2	2.4	1.1	4.3	40.1	1.4	67.0
Total		Count	32	25	8	9	4	16	148	5	247
		Expected Count	32.0	25.0	8.0	9.0	4.0	16.0	148.0	5.0	247.0

Chi-Square Tests Q7

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.014 ^a	7	.331
Likelihood Ratio	9.908	7	.194
Linear-by-Linear Association	.000	1	.993
N of Valid Cases	247		

7 cells (43.8%) have expected count less than 5. Minimum expected count is 1.09.

Cross tabulation of Q8a

Analysis of Paste, Liquid, Powder, Granule Bouillon, Stock and Fond Bases			1=Used, 2 = Not used, 3 = Not Known		Total
			1.00	2.00	
Professional Chef 1	1	Count	128	52	180
		Expected Count	138.0	42.0	180.0
Chef lecturer 2	2	Count	56	4	60
		Expected Count	46.0	14.0	60.0
Total		Count	184	56	240
		Expected Count	184.0	56.0	240.0

Chi-Square Tests Q8a

Analysis of Paste, Liquid, Powder, Granule Bouillon, Stock and Fond Bases	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.422 ^a	1	.000		
Continuity Correction	11.211	1	.001		
Likelihood Ratio	14.964	1	.000		
Fisher's Exact Test				.000	.000
N of Valid Cases	240				

0 cells (.0%) have expected count less than 5. Minimum expected count is 14.00

Cross tabulation of Q8b.

Analysis of Paste, Liquid, Powder and Granule Jus Bases.			1=Used, 2 = Not used, 3 = Not Known			Total
			1.00	2.00	3.00	
Professional Chef 1, Chef lecturer 2	1	Count	91	80	2	173
		Expected Count	100.7	70.8	1.5	173.0
	2	Count	44	15	0	59
		Expected Count	34.3	24.2	.5	59.0
Total		Count	135	95	2	232
		Expected Count	135.0	95.0	2.0	232.0

Chi-Square Tests Q8b

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.990^a	2	.011
Likelihood Ratio	9.788	2	.007
N of Valid Cases	232		

2 cells (33.3%) have expected count less than 5. Minimum expected count is .51.

Cross tabulation of Q8i

Low fat margarine spreads for baking and cooking as alternatives to butter			1=Used, 2 = Not used, 3 = Not Known			Total
			1.00	2.00	3.00	
Professional Chef 1	1	Count	68	103	0	171
		Expected Count	81.0	89.3	.8	171.0
Chef lecturer 2	2	Count	40	16	1	57
		Expected Count	27.0	29.8	.3	57.0
Total		Count	108	119	1	228
		Expected Count	108.0	119.0	1.0	228.0

Chi-Square Tests Q8i

Low fat margarine spreads for baking and cooking as alternatives to butter	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.819^a	2	.000
Likelihood Ratio	20.094	2	.000
N of Valid Cases	228		

2 cells (33.3%) have expected count less than 5. Minimum expected count is .25.

Cross tabulation of 8j

Dairy cream alternatives to fresh cream			1=Used, 2 = Not used, 3 = Not Known			Total
			1.00	2.00	3.00	
Professional Chef 1, Chef lecturer 2	1	Count	40	124	3	167
		Expected Count	52.2	111.1	3.7	167.0
	2	Count	30	25	2	57
		Expected Count	17.8	37.9	1.3	57.0
Total		Count	70	149	5	224
		Expected Count	70.0	149.0	5.0	224.0

Chi-Square Tests Q8j

Dairy cream alternatives to fresh cream	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.644^a	2	.000
Likelihood Ratio	16.960	2	.000
N of Valid Cases	224		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.27.

Cross Tabulation Q12a

The Hotel Restaurant/College /Chef Lecturer Culture is against convenience ingredient usage			1=Strongly agree 2=Agree, 3= Uncertain, 4= Disagree, 5=Strongly Disagree					Total
			1.00	2.00	3.00	4.00	5.00	
1=Professional Chef	1.00	Count	30	72	27	37	2	168
		Expected Count	27.8	61.5	25.5	48.8	4.5	168.0
2 = Chef lecturer	2.00	Count	7	10	7	28	4	56
		Expected Count	9.3	20.5	8.5	16.3	1.5	56.0
Total		Count	37	82	34	65	6	224
		Expected Count	37.0	82.0	34.0	65.0	6.0	224.0

Chi-Square Tests Q12a

The Hotel Restaurant/College /Chef Lecturer Culture is against convenience ingredient usage	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.137^a	4	.000
Likelihood Ratio	24.151	4	.000
Linear-by-Linear Association	18.384	1	.000
N of Valid Cases	224		

2 cells (20.0%) have expected count less than 5. Minimum expected count is 1.50.

Cross tabulation of Q12b

The Hotel Restaurant/College Management Culture is against convenience ingredient usage			1=Strongly agree 2=Agree, 3= Uncertain, 4= Disagree, 5=Strongly Disagree					Total
			1.00	2.00	3.00	4.00	5.00	
1=Professional Chef	1.00	Count	17	39	56	50	6	168
		Expected Count	15.8	34.7	48.2	61.0	8.3	168.0
2 = Chef lecturer	2.00	Count	4	7	8	31	5	55
		Expected Count	5.2	11.3	15.8	20.0	2.7	55.0
Total		Count	21	46	64	81	11	223
		Expected Count	21.0	46.0	64.0	81.0	11.0	223.0

Chi-Square Tests Q12b

The Hotel Restaurant/College Management Culture is against convenience ingredient usage	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.293^a	4	.001
Likelihood Ratio	18.279	4	.001
Linear-by-Linear Association	10.490	1	.001
N of Valid Cases	223		

1 cell (10.0%) has expected count less than 5. Minimum expected count is 2.71.

Cross tabulation Q12c

Convenience ingredient usage is seen by my peers as degrading culinary craft skills			1=Strongly agree 2=Agree, 3= Uncertain, 4= Disagree, 5=Strongly Disagree					Total
			1.00	2.00	3.00	4.00	5.00	
1=Professional Chef	1.00	Count	39	78	24	25	2	168
		Expected Count	33.8	73.5	23.3	33.0	4.5	168.0
2 = Chef lecturer	2.00	Count	6	20	7	19	4	56
		Expected Count	11.3	24.5	7.8	11.0	1.5	56.0
Total		Count	45	98	31	44	6	224
		Expected Count	45.0	98.0	31.0	44.0	6.0	224.0

Chi-Square Tests Q12c

Convenience ingredient usage is seen by my peers as degrading culinary craft skills	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.779^a	4	.001
Likelihood Ratio	16.475	4	.002
Linear-by-Linear Association	15.520	1	.000
N of Valid Cases	224		

2 cells (20.0%) have expected count less than 5. Minimum expected count is 1.50.

Cross tabulation of Q12d

Convenience usage is seen by myself as degrading culinary craft skills			1=Strongly agree 2=Agree, 3= Uncertain, 4= Disagree, 5=Strongly Disagree					Total
			1.00	2.00	3.00	4.00	5.00	
1=Professional Chef	1.00	Count	30	64	22	47	5	168
		Expected Count	29.3	55.5	21.0	55.5	6.8	168.0
2 = Chef lecturer	2.00	Count	9	10	6	27	4	56
		Expected Count	9.8	18.5	7.0	18.5	2.3	56.0
Total		Count	39	74	28	74	9	224
		Expected Count	39.0	74.0	28.0	74.0	9.0	224.0

Chi-Square Tests Q12d

Convenience usage is seen by myself as degrading culinary craft skills	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.497^a	4	.014
Likelihood Ratio	12.603	4	.013
Linear-by-Linear Association	7.933	1	.005
N of Valid Cases	224		

1 cell (10.0%) has expected count less than 5. Minimum expected count is 2.25.

Cross tabulation of Q12f

Convenience ingredients usage supports the re-skilling and professional development of professional chefs			1=Strongly agree 2=Agree, 3= Uncertain, 4= Disagree, 5=Strongly Disagree					Total
			1.00	2.00	3.00	4.00	5.00	
1=Professional Chef	1.00	Count	3	33	37	70	25	168
		Expected Count	4.5	33.8	43.5	64.5	21.8	168.0
2 = Chef lecturer	2.00	Count	3	12	21	16	4	56
		Expected Count	1.5	11.3	14.5	21.5	7.3	56.0
Total		Count	6	45	58	86	29	224
		Expected Count	6.0	45.0	58.0	86.0	29.0	224.0

Chi-Square Tests 12f

Convenience ingredients usage supports the re-skilling and professional development of professional chefs	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.770^a	4	.044
Likelihood Ratio	9.578	4	.048
Linear-by-Linear Association	5.552	1	.018
N of Valid Cases	224		

2 cells (20.0%) have expected count less than 5. Minimum expected count is 1.50.

Cross tabulation of Q13b

General culinary knowledge would benefit from updates and insight into the usage of convenience ingredients			1=Strongly agree 2=Agree, 3= Uncertain, 4= Disagree, 5=Strongly Disagree					Total
			1.00	2.00	3.00	4.00	5.00	
1=Professional Chef	1.00	Count	22	89	32	17	5	165
		Expected Count	21.7	97.8	26.1	14.9	4.5	165.0
2 = Chef lecturer	2.00	Count	7	42	3	3	1	56
		Expected Count	7.3	33.2	8.9	5.1	1.5	56.0
Total		Count	29	131	35	20	6	221
		Expected Count	29.0	131.0	35.0	20.0	6.0	221.0

Chi-Square Tests Q13b

General culinary knowledge would benefit from updates and insight into the usage of convenience ingredients	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.721^a	4	.045
Likelihood Ratio	10.981	4	.027
Linear-by-Linear Association	3.689	1	.055
N of Valid Cases	221		

2 cells (20.0%) have expected count less than 5. Minimum expected count is 1.52.

Appendix 4

Quantitative research data sheets

(Q1)	Years worked in the industry?								
	1 to 5 (1)	6 to 10 (2)	11 to 15 (3)	16 to 20 (4)	21-25 (5)	25 to 30 (6)	30 to 35 (7)	35 plus (8)	Total
Hotel chef (1)	5	11	18	30	34	31	23	28	180
Chef lecturer (2)	0	0	3	6	9	14	21	14	67
Total	5	11	21	36	43	45	44	42	247

(Q2)	Years worked in current employment?								
	1 to 5 (1)	6 to 10 (2)	11 to 15 (3)	16 to 20 (4)	21-25 (5)	25 to 30 (6)	30 to 35 (7)	35 plus (8)	Total
Hotel chef (1)	91	33	20	12	9	8	3	3	179
Chef lecturer (2)	17	26	11	5	3	2	1	2	67
Total	108	59	31	17	12	10	4	5	246

(Q3)	How would you describe your job title?					
	Executive head chef (1)	Executive chef (2)	Corporate executive chef (3)	Senior sous chef (4)	Other (5)	Total
Hotel chef (1)	68	37	4	13	56	178
Total	68	37	4	13	56	178
	Chef lecturer (1)	Other (2)				
Chef lecturer (2)	45	21				66
Total	45	21				66

(Q4)	Professional chef qualifications attained					
	City & Guilds (1)	NVQs (2)	In-house trg & dev (3)	Culinary arts certificates (4)	Other (5)	Total
Hotel chef (1)	124	48	57	44	29	302
Chef lecturer (2)	57	19	24	19	18	137
Total	181	67	81	63	47	439

(Q5)		Hotel chefs additional culinary development					
	Work experience (1)	Further culinary education (2)	None (3)	Other (4)	Total		
Hotel chef (1)	106	51	43	16	216		
Total	106	51	43	16	216		
		Chef lecturer training schemes undertaken to become a lecturer					
	Assessor award (1)	Verifier award (2)	C&G teaching in FE Cert (3)	Post grad Cert Ed (PGCE) (4)	MA (5)	Other (6)	Total
Chef lecturer (2)	60	44	38	33	2	12	189
Total	60	44	38	33	2	12	189

(Q6)		Membership of professional chef associations							
	Craft Guild of Chefs (1)	Master Chefs of GB (2)	British Culinary Fed'n (3)	Welsh National Culinary Assn (4)	Fed'n Chefs Scotland (5)	Panel of chefs Ireland (6)	None (7)	Other (8)	Total
Hotel chef (1)	49	18	6	15	4	48	0	48	188
Chef lecturer (2)	15	4	5	3	2	0	36	15	80
Total	64	22	11	18	6	48	36	63	268

(Q7)		Which typology best describes you as a chef?							
	Tradition oriented chef (1)	Contemporary oriented chef (2)	Master chef (3)	Entrepreneurial chef (4)	Pragmatic chef (5)	Adventurous Chef (6)	Mixture of one or more (7)	Other (8)	Total
Hotel chef (1)	22	18	6	9	2	13	108	2	180
Chef lecturer (2)	10	7	2	0	2	3	40	3	67
Total	32	25	8	9	4	16	148	5	247

(Q8a to 8q)		Convenience ingredient usage indicator						
	Hotel chef (1)				Chef lecturer (2)			
	Used (1)	Not used (2)	Not known (3)	Total	Used (1)	Not used (2)	Not known (3)	Total
Bouillon /stock base	125	48	0	173	56	4	0	60
Jus base	91	80	2	173	44	15	0	59
Gravy base	75	96	1	172	27	28	1	56
Roux granules	14	144	6	164	1	50	3	54
Indian / Oriental pastes	126	47	0	173	44	13	1	58
North African / Americas pastes	72	94	4	170	17	38	0	55
European pastes	68	99	2	169	20	35	0	55
Herb pastes	70	93	2	165	21	35	0	56
Low fat spreads	68	103	0	171	40	16	1	57
Dairy Cream alternatives	40	124	3	167	30	25	2	57
Mayonnaise	148	26	0	174	52	6	0	58
Gelling agents	90	76	4	170	29	27	0	56
Fruit pastes / powders	97	71	3	171	24	32	0	56
Dairy pastes	23	132	12	167	9	40	4	53
Nut pastes	104	70	1	175	25	26	1	52
Alcohol pastes	35	117	15	167	5	41	6	52
Cooking alcohol with added salt	101	68	1	170	30	20	3	53

(Q9) What descriptor best categorises convenience ingredients?			
	Hotel chef (1)	Chef lecturer (2)	Total
Pre-prepared Convenience food ingredients (1)	18	9	27
Pre-prepared Convenience ingredients (2)	25	15	40
Pre-prepared food ingredients of convenience (3)	17	5	22
Professional convenience ingredients (4)	36	8	44
Modern professional convenience ingredients (5)	37	12	49
Manufactured convenience ingredients (6)	39	9	48
Branded convenience ingredients (7)	5	2	7
Total	177	60	237

(Q10a to10l)	Hotel chef (1)						
I prefer using ingredients that :	Strongly agree (1)	Agree (2)	Uncertain (3)	Disagree (4)	Strongly disagree (5)	Total	
Are fresh & unprepared	119	48	1	0	0	168	
Are a mixture of fresh and convenience	22	77	25	37	9	170	
Seasonal and local	128	40	2	0	1	171	
Are easy to prepare and require less physical labour	19	48	23	59	18	167	
Support waste reduction in the kitchen	89	61	13	8	0	171	
Reduce labour and food costs	46	60	26	29	7	168	
Support food safety in the kitchen	95	56	16	1	0	168	
Support sustainability	98	59	8	4	0	169	
Are branded and of consistent high quality	43	73	29	20	3	168	
Are economical brands but may vary in quality	8	15	28	65	51	167	
Are low in additives such as salt and MSG	51	62	29	14	13	169	
Are gluten free	12	45	70	28	11	166	
(Q10a to10l)	Chef lecturer (2)						
Are fresh & unprepared	44	11	0	0	1	56	
Are a mixture of fresh and convenience	7	24	10	11	1	53	
Seasonal and local	41	13	1	1	1	57	
Are easy to prepare and require less physical labour	3	8	8	30	6	55	
Support waste reduction in the kitchen	32	20	2	3	0	57	
Reduce labour and food costs	15	18	11	9	3	56	
Support food safety in the kitchen	34	15	3	2	1	55	
Support sustainability	37	14	4	1	1	57	
Are branded and of consistent high quality	18	19	13	5	1	56	
Are economical brands but may vary in quality	4	6	13	22	10	55	
Are low in additives such as salt and MSG	24	20	8	2	2	56	
Are gluten free	6	13	24	9	1	53	

(Q11a to11g)	Hotel chef (1)					
Convenience ingredient usage is acceptable :	Highly acceptable (1)	Acceptable (2)	Uncertain (3)	Unacceptable (4)	Highly unacceptable (5)	Total
For high volume banquet / event catering	33	100	15	14	7	169
Times of chef and skills shortages	15	93	13	40	8	169
In times of recession / economic downturn	3	58	38	57	11	167
Where food safety is an issue	36	82	20	22	9	169
When equivalent fresh ingredients are unavailable or too expensive	13	90	19	35	11	168
As a kitchen back up for the unexpected	21	85	16	34	12	168
For final recipe flavour enhancement	14	63	31	38	23	169
(Q11a to11g)	Chef lecturer (2)					
For high volume banquet / event catering	13	37	3	3	0	56
Times of chef and skills shortages	9	34	5	6	0	54
In times of recession / economic downturn	4	22	16	13	1	56
Where food safety is an issue	11	33	6	5	1	56
When equivalent fresh ingredients are unavailable or too expensive	10	30	7	7	2	56
As a kitchen back up for the unexpected	10	36	5	4	1	55
For final recipe flavour enhancement	5	27	11	10	3	56

(Q12a to12g)	Hotel chef (1)						
Workplace attitudes towards the usage of convenience ingredients	Strongly agree (1)	Agree (2)	Uncertain (3)	Disagree (4)	Strongly disagree (1)	Total	
The Hotel Restaurant/College /Chef Lecturer Culture is against convenience ingredient usage	30	72	27	37	2	168	
The Hotel Restaurant/College Management Culture is against convenience ingredient usage	17	39	56	50	6	168	
Convenience ingredients usage is seen by my peers as degrading culinary craft skills	39	78	24	25	2	168	
Convenience ingredients usage is seen by myself as degrading culinary craft skills	30	64	22	47	5	168	
Convenience ingredient usage supports variety of choice and enhances general culinary awareness	7	62	39	45	15	168	
Convenience ingredient usage supports the re-skilling and professional development of professional chefs	3	33	37	70	25	168	
Convenience ingredient usage supports the de-skilling of professional chefs	33	74	24	32	5	168	
(Q12a to12g)	Chef lecturer (1)						
The Hotel Restaurant/College /Chef Lecturer Culture is against convenience ingredient usage	7	10	7	28	4	56	
The Hotel Restaurant/College Management Culture is against convenience ingredient usage	4	7	8	31	5	55	
Convenience ingredients usage is seen by my peers as degrading culinary craft skills	6	20	7	19	4	56	
Convenience ingredients usage is seen by myself as degrading culinary craft skills	9	10	6	27	4	56	
Convenience ingredient usage supports variety of choice and enhances general culinary awareness	3	30	10	7	4	54	
Convenience ingredient usage supports the re-skilling and professional development of professional chefs	3	12	21	16	4	56	
Convenience ingredient usage supports the de-skilling of professional chefs	11	16	12	15	2	56	

(Q13a to13d)	Hotel chef (1)					
Educational development	Strongly agree (1)	Agree (2)	Uncertain (3)	Disagree (4)	Strongly disagree (5)	Total
My professional culinary development has prepared me to understand and use convenience ingredients	25	85	14	32	9	165
General culinary knowledge would benefit from updates and insight into the usage of convenience ingredients	22	89	32	17	5	165
Convenience ingredient knowledge awareness should form part of a chefs continuous professional development	26	86	23	25	4	164
Convenience ingredient knowledge awareness should form part of catering college professional cookery curriculum and courses	23	60	35	31	16	165
(Q13a to13d)	Chef lecturer (2)					
My professional culinary development has prepared me to understand and use convenience ingredients	11	35	3	5	1	55
General culinary knowledge would benefit from updates and insight into the usage of convenience ingredients	7	42	3	3	1	56
Convenience ingredient knowledge awareness should form part of a chefs continuous professional development	9	33	11	3	0	56
Convenience ingredient knowledge awareness should form part of catering college professional cookery curriculum and courses	8	31	9	4	4	56

(Q14a to14f)				Hotel chef (1)				Chef lecturer (2)			
	Yes (1)	No (2)	Unsure (3)	Total	Yes (1)	No (2)	Unsure (3)	Total			
Should food manufacturers and suppliers facilitate more training and development methods for convenience ingredients through:											
On line audio training and development packages?	93	44	27	164	39	12	5	56			
Bespoke recipe and menu hardware concept packages?	111	34	19	164	35	12	9	56			
On line recipe and menu software packages?	123	28	12	163	42	9	4	55			
On line nutrition / dietary, recipe and menu packages?	133	19	12	164	48	5	3	56			
Bespoke in house training courses?	81	54	29	164	35	13	8	56			
Closer collaboration with vocational training providing bodies such as City and Guilds?	95	38	30	163	36	11	8	55			

(Q15a to15e)			
What definition do you believe best defines convenience ingredients in the modern professional kitchen?	Hotel chef (1)	Chef lecturer (2)	Total
Those that transfer the time and activities of preparation from the professional chef to the food processor	13	4	17
Those that professional chefs are inclined to agree save on time, money, skill and labour costs in regard to meal preparation	24	5	29
Ingredients processed to an advanced stage of preparation in order to save time, skill, labour and equipment	15	4	19
Any fully or partially prepared food ingredient in which significant preparation time, culinary skills, or energy inputs have been transferred from the professional chef to the food manufacturer and distributor	21	3	24
Ingredients that meet the culinary aspirations, needs and convenience of the professional chef at the right time and for the right occasion without compromising consistency and high quality standards of the finished food product served to the customer	100	40	140
Total	173	56	229

Appendix 5

Quantative findings tables of comparison

Q1. How many years have you worked in the food and hospitality industry?					
	Options	Hotel Chefs	%	Chef Lecturers	%
a)	1-5 years	5	2.8%	0	0.0%
b)	6-10 years	11	6.1%	0	0.0%
c)	11-15years	18	10%	3	4.5%
d)	16-20 years	34	18.9%	6	9%
e)	21-25 years	30	16.7%	9	13.4%
f)	26-30 years	31	17.2%	14	20.9%
g)	31-35 years	23	12.8%	21	31.3%
h)	35 years plus	28	15.6%	14	20.9%
	Answered question	180		67	
	Skipped question	0		0	
	Total	180		67	

Q2. How many years have you worked in your current employment?					
	Options	Hotel Chefs	%	Chef Lecturers	%
a)	1-5 years	91	50.8%	17	26.6%
b)	6-10 years	33	18.4%	25	39.1%
c)	11-15years	20	11.2%	11	17.2%
d)	16-20 years	12	6.7%	5	7.8%
e)	21-25 years	9	5%	3	4.7%
f)	26-30 years	8	4.5%	1	1.6
g)	31-35 years	3	1.7%	1	1.6
h)	35 years plus	3	1.7%	1	1.6
	Answered question	179		64	
	Skipped question	1		3	
	Total	180		67	

Q3. Hotel Chef - How would you describe your job title?		
Answer Options	Response Percent	Response Count
a) Executive Head Chef	38.2%	68
b) Executive Chef	20.8%	37
c) Corporate Executive Chef	2.2%	4
d) Senior Sous Chef	7.3%	13
e) Other (please specify)	31.5%	56
	<i>answered question</i>	178

		<i>skipped question</i>	2
Q3. Chef lecturer - How would you describe job title?			
Answer Options		Response Percent	Response Count
a) Chef Lecturer		68.2%	45
b) Other (please specify)		31.8%	21
<i>answered question</i>			66
<i>skipped question</i>			1

Q4. What professional chef qualifications have you attained?					
	Options	Hotel Chefs	%	Chef Lecturers	%
a)	City & Guilds Professional Certificates	124	70.5%	57	86.4%
b)	Industry recognised NVQs	48	27.3%	19	28.8%
c)	Industry recognised in house training & development	57	32.4%	24	36.4%
d)	Industry recognised Culinary Arts Certificates	44	25.0%	19	28.8%
e)	Other (please specify)	29	16.5%	18	27.3%
		Answered question		66	
		Skipped question		1	
		Total		67	

Q5. Hotel Chef - What additional culinary development have you undertaken to enhance your professional qualifications? (One or more answers may be applicable)		
Answer Options	Response Percent	Response Count
a) Work experience/courses at Internationally acclaimed cookery schools/restaurants	59.9%	106
b) Further culinary education e.g. Food & Hospitality Degree or Culinary Arts equivalent	28.8%	51
c) None	24.3%	43
d) Other (please specify)	9.0%	16
<i>answered question</i>		177
<i>skipped question</i>		3

Q5. Chef Lecturer - What training scheme/s did you undertake to become a lecturer in Food & Hospitality? (One or more answers may be applicable)		
Answer Options	Response Percent	Response Count
a) Assessor award	90.9%	60
b) Verifier award	66.7%	44
c) C&G Teaching in FE Certificate	57.6%	38
d) Post grad Cert of Edn (PGCE)	50.0%	33
e) MA in education	3.0%	2
f) Other (please specify)	18.2%	12
answered question		66
skipped question		1

Q6. What professional chef associations do you have membership of?

Options	Hotel Chefs	%	Chef Lecturers	%
a) Craft Guild of Chefs	49	44.5%	15	23.4%
b) Master Chefs of Great Britain	41	37.3%	4	6.3%
c) British Culinary Federation	18	16.4%	5	7.8%
d) Welsh National Culinary Association	6	5.5%	3	4.7%
e) Federation of Chefs Scotland	15	13.6%	2	3.1%
Panel of Chefs Ireland	4	3.6%	0	0.0%
None			36	56.3%
Other	48	43.6%	15	23.4%
Answered question	110		64	
Skipped question	70		3	
Total	180		67	

Q7. Generally speaking from the typologies below how best would you describe yourself as a chef?

Chef Typology Options	Hotel Chefs	%	Chef Lecturers	%
a) Tradition Oriented Chefs	22	12.2%	10	14.8%
b) Contemporary Oriented Chefs	18	10%	7	10.5%
c) Master Chef	6	3.4%	2	3%
d) Entrepreneurial Chef	9	5%	0	0%
e) Pragmatic Chef	2	1.1%	2	3%
f) Adventurous Chef	13	7.2%	3	4.5%
g) Mixture of one or more of the above	108	60%	40	59.7%
h) Other	2	1.1%	3	4.5%
Answered question	180		67	
Skipped question	0		0	
Total	180		67	

Q8. Below is a generic, but not exhaustive, list of Convenience

Ingredients available for use in professional kitchens. Please indicate whether you use them in your kitchen by ticking 'used' or not 'used'. If you have no knowledge of these ingredients please tick 'not known'. (HC = Hotel Chef, CL = Chef Lecturer)

Options Statements	Used				Not used				Not Known					
	HC	%	CL	%	HC	%	CL	%	HC	%	PC	%	HC Rtg	CL Rtg
a. Paste, Liquid, Powder, Granule Bouillon/Stock/Fond Base	125	72%	56	93%	48	28%	4	7%	0	0%	0	0%	1.28	1.07
b. Paste, Liquid, Powder, Granule Jus Base	91	52%	44	75%	80	47%	15	25%	2	1%	0	0%	1.49	1.25
c. Paste, Liquid, Powder, Granule Gravy Base	75	44%	27	48%	96	55%	28	50%	1	1%	1	2%	1.57	1.54
d. White or Brown Roux Granules	14	9%	1	2%	144	87%	50	93%	6	4%	3	5%	1.95	2.04
e. Indian, Oriental, Asian Pastes for Sauces and Marinades	126	73%	44	76%	47	27%	13	2%	0	0%	1	2%	1.2	1.26
f. North African, Americas Pastes for Sauces and Marinades	72	42%	17	31%	94	55%	38	69%	4	3%	0	0%	1.6	1.69
g. European Pastes for Sauces and Marinades	68	40%	20	36%	99	59%	35	64%	2	1%	0	0%	1.61	1.64
h. Herb Paste/Purees	70	42%	21	37%	93	57%	35	63%	2	1%	0	0%	1.59	1.63
i Low Fat Margarine Spreads for baking and cooking as alternatives to butter	68	40%	40	70%	103	60%	16	28%	0	0%	1	2%	1.6	1.32
J. Dairy Cream Alternative to Fresh Cream	40	24%	30	53%	124	74%	25	44%	3	2%	2	3%	1.78	1.51
k. Mayonnaise or oil based dressings	148	85%	52	90%	26	15%	6	10%	0	0%	0	0%	1.15	1.1
l. Powdered vegetable Gelling Agent Texturisers	90	53%	29	52%	76	45%	27	48%	4	2%	0	0%	1.49	1.48
m. Dessert fruit pastes and powders	97	57%	24	43%	71	41%	32	57%	3	2%	0	0%	1.45	1.57
n. Dairy Pastes	23	14%	9	17%	132	79%	40	75%	12	7%	4	8%	1.93	1.91
o. Nut Pastes	104	59%	25	48%	70	40%	26	50%	1	1%	1	2%	1.41	1.54
p. Alcohol Pastes	35	21%	5	10%	117	70%	41	79%	15	9%	6	11%	1.88	2.02
q. Alcohol and Spirits with Added Salt for Cooking	101	59%	30	56%	68	40%	20	38%	1	1%	3	6%	1.41	1.49
r. Other	12		4											
Answered Questions	177		60											
Skipped questions	3		7											

Q9. What statement do you believe best represents the ingredients listed in the previous question, Q8?				
Answer Options	Hotel Chefs	%	Chef Lecturers	%
a) Pre-prepared convenience food ingredients	18	10.17%	9	15%
b) Pre-prepared convenience ingredients	25	14.12%	15	25%
c) Pre-prepared food ingredients of convenience	17	9.6%	5	8.33%
d) Professional convenience ingredients	36	20.34%	8	13.33%
e) Modern professional convenience ingredients	37	20.9%	12	20%
f) Manufactured Convenience Ingredients	39	22.03%	9	15%
g) Branded Convenience Ingredients	5	2.82%	2	3.3%
Answered question	177		60	
Skipped question	3		7	
Total	180		67	

Q10. I prefer using ingredients that are:																				
Options	Strongly agree				Agree				Uncertain				Disagree				Strongly disagree			
Statement	HC	%	CL	%	HC	%	CL	%	HC	%	CL	%	HC	%	CL	%	HC	%	CL	%
a. Fresh and unprepared	119	71%	44	79%	48	28.5%	11	20%	1	.5%	0	0%	0	0%	0	0%	0	0%	1	2%
b. A mixture of fresh and convenience	22	13%	7	13%	77	45%	24	45%	25	15%	10	19%	37	22%	11	21%	9	5%	1	2%
c. Seasonal and local	128	75%	41	72%	40	23%	13	23%	2	1%	1	2%	0	0%	1	2%	1	1%	1	2%
d. Easy to prepare and require less physical labour	19	11%	3	5%	48	29%	8	15%	23	14%	8	15%	59	35%	30	54%	18	11%	6	11%
e. Support waste reduction in the kitchen	89	53%	32	56%	61	36%	20	35%	13	7%	2	4%	8	4%	3	5%	0	0%	0	0%
f. Reduce labour and food costs	46	27%	15	27%	60	36%	18	32%	26	16%	11	20%	29	17%	9	16%	7	4%	3	5%
g. Support food safety in the kitchen	95	57%	34	62%	56	33%	15	27%	16	9%	3	5%	1	1%	2	4%	0	0%	1	2%
h. Support sustainability	98	58%	37	65%	59	35%	14	25%	8	5%	4	7%	4	2%	1	2%	0	0%	1	1%
i. Branded and of consistent high quality	43	26%	18	32%	73	43%	19	34%	29	17%	13	23%	20	12%	5	9%	3	2%	1	2%
j. Of economical brands but may vary in quality	8	5%	4	7%	15	9%	6	11%	28	17%	13	24%	65	39%	22	40%	51	31%	10	18%
k. Low in additives such as salt and MSG (Umami)	51	30%	24	43%	62	37%	20	36%	29	17%	8	14%	14	8%	2	4%	13	8%	2	4%
l. Gluten free	12	7%	6	11%	45	27%	13	25%	70	42%	24	45%	28	17%	9	17%	11	7%	1	2%
Key: HC = Hotel Chef. CL = Chef Lecturer													Answered				173 HC 60 CL			
													Skipped Question				7 HC 7 CL			

Q11. Convenience ingredient usage is acceptable:	Highly acceptable		Acceptable		Uncertain		Unacceptable		Highly Unacceptable		
	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	
a. For high volume banquets and events catering usage	33 20%	13 24%	100 59%	37 66%	15 9%	3 5%	14 8%	3 5%	7 4%	0 0%	
b. In times of chef and skills shortages	15 9%	9 17%	93 55%	34 63%	13 8%	5 9%	40 23%	6 11%	8 5%	0 0%	
c. In times of recession and economic downturn	3 2%	4 7%	58 35%	22 39%	38 23%	16 29%	57 34%	13 23%	11 6%	1 1%	
d. Where food safety is an issue	36 21%	11 19%	82 49%	33 59%	20 12%	6 11%	22 13%	5 9%	9 5%	1 2%	
e. When equivalent fresh ingredients are unavailable or too expensive	13 8%	10 18%	90 54%	30 54%	19 11%	7 12%	35 21%	7 12%	11 6%	2 4%	
f. as a kitchen back up for the unexpected	21 12%	10 18%	85 51%	36 64%	16 10%	5 9%	34 20%	4 7%	12 7%	1 2%	
g. Support For final recipe dish enhancement	14 8%	5 9%	63 37%	27 48%	31 18%	11 20%	38 23%	10 18%	23 14%	3 5%	
Answered	Professional Chefs 170	Chef Lecturers 57									
Skipped	10	10									

Q12 Workplace attitudes towards the usage of convenience ingredients	Strongly Agree		Agree		Uncertain		Disagree		Strongly Disagree		
	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	
The Hotel Restaurant/College /Chef Lecturer Culture is against convenience ingredient usage	30 18%	7 13%	72 43%	10 18%	27 16%	7 12%	37 22%	28 50%	2 1%	4 7%	
The Hotel Restaurant/College Management Culture is against convenience ingredient usage	17 10%	4 7%	39 23%	7 13%	56 33%	8 15%	50 30%	31 56%	6 4%	5 9%	
Convenience ingredients usage is seen by my peers as degrading culinary craft skills	39 23%	6 11%	78 47%	20 36%	24 14%	7 12%	25 15%	19 34%	2 1%	4 7%	
Convenience ingredients usage is seen by myself as degrading culinary craft skills	30 18%	9 16%	64 38%	10 18%	22 13%	6 11%	47 28%	27 48%	5 3%	4 7%	
Convenience ingredient usage supports variety of choice and enhances general culinary awareness	7 4%	3 6%	62 37%	30 56%	39 23%	10 18%	45 27%	7 13%	15 9%	4 7%	
Convenience ingredient usage supports the re-skilling and professional development of professional chefs	3 2%	3 5%	33 20%	12 21%	37 22%	21 38%	70 41%	16 29%	25 15%	4 7%	
Convenience ingredient usage supports the de-skilling of professional chefs	33 20%	11 20%	74 44%	16 29%	24 14%	12 21%	32 19%	15 27%	5 3%	2 3%	
Answered	Professional Chefs 168	Chef Lecturers 57									
Skipped	12	10									

Q13. Please tick each statement as appropriate to rate your level of agreement:	Strongly Agree		Agree		Uncertain		Disagree		Strongly disagree	
	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r	Hotel Chef	Chef Lect'r
a. My professional culinary development has prepared me to understand and use convenience ingredients	25 15%	11 20%	85 51%	35 64%	14 8%	3 5%	32 19%	5 9%	9 5%	1 2%
b. General culinary knowledge would benefit from updates and insight into the usage of convenience ingredients	22 13%	7 13%	89 54%	42 75%	32 20%	3 5%	17 10%	3 5%	5 3%	1 2%
c. Convenience ingredient knowledge awareness should form part of a chefs continuous professional development (CPD)	26 16%	9 16%	86 52%	33 59%	23 14%	11 20%	25 15%	3 5%	4 3%	0 0%
d. Convenience ingredient knowledge awareness should form part of catering college professional cookery curriculum and courses	23 14%	8 14%	60 36%	31 56%	35 21%	9 16%	31 19%	4 7%	16 10%	4 7%

Q14. Do you believe food industry ingredient manufacturers and suppliers should facilitate more training and development methods for their convenience ingredients through?	Yes		No		Unsure	
	Hotel Chef	Chef Lecturer	Hotel Chef	Chef Lecturer	Hotel Chef	Chef Lecturer
On line audio training and development packages?	93 57%	39 70%	44 27%	12 21%	27 16%	5 9%
Bespoke recipe and menu hardware concept packages?	111 68%	35 63%	34 21%	12 21%	19 11%	9 16%
On line recipe and menu software packages?	123 76%	42 77%	28 17%	9 16%	12 7%	4 7%
On line nutrition / dietary, recipe and menu packages?	133 81%	48 86%	19 12%	5 9%	12 7%	3 5%
Bespoke in house training courses	81 49%	35 63%	54 33%	13 23%	29 18%	8 14%
Closer collaboration with vocational training providing bodies such as City and Guilds	95 58%	36 65%	38 23%	11 20%	30 19%	8 15%
Answered	165	56				
Skipped	15	11				

Q15. What definition do you believe best defines convenience ingredients in the modern professional kitchen?

Answer Options	Hotel chefs		Chef Lecturers	
a) Those that transfer the time and activities of preparation from the professional chef to the food processor	11	7%	4	7%
b) Those that professional chefs are inclined to agree save on time, money, skill and labour costs in regard to meal preparation	20	13%	5	9%
c) Ingredients processed to an advanced stage of preparation in order to save time, skill, labour and equipment	10	6%	4	7%
d) Any fully or partially prepared food ingredient in which significant preparation time, culinary skills, or energy inputs have been transferred from the professional chef to the food manufacturer and distributor	18	11%	3	5%
e) Ingredients that meet the culinary aspirations, needs and convenience of the professional chef at the right time and for the right occasion without compromising consistency and high quality standards of the finished food product served to the customer	100	63%	40	72%
Answered	159	88%	56	83.5%
Skipped	21	12%	11	16.5%

Appendix 6

Summary of quantitative chi-square tests of significance

	Summary of Findings	Significant Difference?		
		Chi-Sq	Y	N
	Demographic Questions 1-7			
1	How many years have you worked in the food and hospitality Industry?	.003	✓	
2	How many years have you worked at this hotel/restaurant/college?	.016	✓	
3	How would you describe your job title?	N/A		
4	What professional chef qualifications have you attained?	N/A		
5	What additional culinary development have you undertaken?	N/A		
6	Are you a member of any of the following National/International Professional Associations?	N/A		
7	Generally speaking from the typologies below how best would you describe yourself as a chef?	N/A		✓

Q8 Convenience ingredient usage

Summary of Findings		Significant Difference?		
	Convenience Ingredient Usage - Q8 Please indicate whether you use convenience ingredients in your kitchen by ticking the appropriate box; used, not used or not known?	Chi-sq	Y	N
a	Paste, liquid, powder, granule bouillon, stock or fond base	.000	✓	
b	Paste, liquid, powder, granule jus base	.011	✓	
c	Paste, liquid, powder, granule gravy base	.559		✓
d	White or brown roux granules	.213		✓
e	Indian, oriental, Asian pastes for sauces and marinades	.181		✓
f	North African, Americas pastes for sauces and marinades	.135		✓
g	European pastes for sauces and marinades	.611		✓
h	Herb pastes / purees	.550		✓
i	Low fat margarine spreads for baking and cooking as alternatives to butter	.000	✓	
j	Dairy cream alternatives to fresh cream	.000	✓	
k	Mayonnaise or oil based dressings	.379		✓
l	Powdered vegetable gelling agent texturisers	.486		✓
m	Dessert fruit pastes and powders	.092		✓
n	Dairy pastes	.836		✓
o	Nut pastes	.261		✓
p	Alcohol pastes	.175		✓
q	Alcohol and spirits with added salt for cooking	.052		✓

Q9 Convenience ingredient categorisation

	Summary of Findings	Significant Difference?		
		Chi-sq	Y	N
	Convenience Ingredient Usage - Q9			
a	What statement best represents the ingredients listed at question 8?	.372		√

Q10 Convenience ingredient usage by hotel chefs and chef lecturers

	Summary of Findings	Significant Difference?			Comments
		Chi-sq	Y	N	
	Convenience Orientation - Q10. I prefer using ingredients that:				
a	are fresh and unprepared	.175		√	
b	are a mixture of fresh and convenience	.824		√	
c	are seasonal and local	.429		√	
d	are easy to prepare and require less physical labour	.072		√	
e	support waste reduction in the kitchen	.739			
f	reduce labour and food costs in the kitchen	.943		√	
g	support food safety in the kitchen	.117		√	
h	support sustainability	.266		√	
i	are branded and of consistent high quality	.606		√	
j	are of economical brands but may vary in quality	.406		√	
k	are low in additives such as salt and MSG (umami)	.327		√	
l	are gluten free	.617		√	

Q11 Acceptable levels of convenience

	Summary of Findings	Significant Difference?			Comments
		Chi-sq	Y	N	
	Q11. Acceptable Levels of Convenience. Convenience ingredient usage is acceptable for:				
a	high volume banquet event catering usage	.398		√	
b	in times of chef and skills shortages	.073		√	
c	in times of recession/economic downturn	.090		√	
d	where food safety is an issue	.598		√	
e	when equivalent fresh ingredients are unavailable or too expensive	.169		√	
f	as a kitchen back up for the unexpected	.142		√	
g	For final recipe flavour enhancement	.377		√	

Q12 Attitudes and barriers to convenience ingredient usage

	Summary of Findings	Significant Difference?			Comments
		Chi-sq	Y	N	
	Q12. Attitudes and Barriers to Convenience Ingredient Usage				
a	The Hotel Restaurant/College /Chef Lecturer Culture is against convenience ingredient usage	.000	✓		
b	The Hotel Restaurant/College Management Culture is against convenience ingredient usage	.001	✓		
c	Convenience ingredient usage is seen by my peers as degrading culinary craft skills	.001	✓		
d	Convenience usage is seen by myself as degrading culinary craft skills	.014	✓		
e	Convenience ingredients usage supports variety of choice and enhances general culinary awareness	.114		✓	
f	Convenience ingredients usage supports the re-skilling and professional development of professional chefs	.044	✓		
g	Convenience ingredients usage encourages the de-skilling of professional chefs	.279		✓	

Q13 Culinary educational knowledge of convenience ingredients

	Summary of Findings	Significant Difference?			Comments
		Chi-sq	Y	N	
	Q13. Analysis of Professional Culinary Development towards Convenience Ingredients				
a)	My professional culinary development has prepared me to understand and use convenience ingredients	.199		✓	
b)	General culinary knowledge would benefit from updates and insight into the usage of convenience ingredients	.045	✓		
c)	Convenience ingredient knowledge/awareness should form part of a chefs CPD	.219		✓	
d)	Convenience Ingredient Awareness should form part of Catering Colleges Professional Cookery Curriculums and Courses	.088		✓	

Q14 Culinary educational development of convenience Ingredients

	Summary of Findings	Significant Difference?			Comments
		Chi-sq	Y	N	
	Q14. Do you believe industry convenience ingredients manufacturers and suppliers should facilitate more convenience training and development methods of their ingredients through:				
a)	On line audio training and development packages	.195		√	
b)	Bespoke recipe and menu hardware concept packages	.657		√	
c)	On line recipe and menu software packages	.990		√	
d)	On line nutritional / dietary, recipe and menu packages	.736		√	
e)	Bespoke in-house training courses	.230		√	
f)	Closer collaboration with vocational training providing bodies such as City and Guilds	.636		√	

Q15 Definition of Convenience Ingredients

	Summary of Findings	Significant Difference?			Comments
		Chi-sq	Y	N	
	Q15. What definition do you believe best defines convenience ingredients available for use in the professional kitchen:				
a)	Those that transfer the time and activities of preparation from the professional chef to the food processor			√	
b)	Those that professional chefs are inclined to agree save on time, money, skill and labour costs in regard to meal preparation			√	
c)	Ingredients processed to an advanced stage of preparation in order to save time, skill, labour and equipment			√	
d)	Any fully or partially prepared food ingredient in which significant preparation time, culinary skills, or energy inputs have been transferred from the professional chef to the food manufacturer and distributor			√	
e)	Ingredients that meet the culinary aspirations, needs and convenience of the professional chef at the right time and for the right occasion without compromising consistency and high quality standards of the finished food product served to the customer			√	

Appendix 7

Qualitative interview transcripts

Key I = Interviewer, P = Participant/Key informant

Name: Key informant 1 culinary director catering college London

Question	Key responses
1. How many years have you worked in the hotel/restaurant sector of the food and hospitality industry?	25-30
2. How many years have you worked at this hotel /restaurant college?	11-15
3. How would you describe your job title?	Head of Department in Culinary Arts
4. What culinary training scheme did you undertake to become a professional chef/chef educator/	A and b plus development
5. What professional Chef Qualifications have you attained? (one or more answers may be applicable)	a, c and d
6. What trainings schemes did you undertake to become a lecturer in food and hospitality? (One or more answers may be applicable)	Not answered
7. Are you a member of the following National/International Professional Chef Associations? (more than one response may be appropriate)	b, c, d, h and other Academy of Culinary Arts
8. Do you believe catering colleges should provide student chefs with more focus and direction related to the usage of modern professional convenience ingredients as currently practiced in the industry	P. We look at stocks, for instance, as a convenience item. Yes, it's very important for a student to understand how to make fresh stocks and to rotate the fresh stocks as well, but it's equally important that they understand how to make convenience stocks as well; you could either make them too strong or too weak, there is an art to that. There's also an art to using these stocks at the same time. We do that here but it's not something we particularly shout about but it is something we introduce right from the word go is that there is a place for convenience stocks. There's a stigma

	<p>attached to that, sometimes, in the industry. If I were to sit next to, say, Jason Atherton and say we're using convenience stocks, he might frown a little bit. He might do, but if he wanted to go deeper into what we cover we would tell him without too much of a problem and we would justify why we're doing it. There is a stigma attached to it and we need to be very careful, every college needs to be careful about what they say and what they get into in terms of what they teach because the industry is very happy to jump on the bandwagon and be culinary snobs.</p>
<p>9. How much attention does your college give to the teaching and usage of modern professional convenience ingredients as currently practiced within the food and hospitality industry?</p>	<p>P. A lot We make people aware of the alternatives being practiced in the industry. One of the things you do with that is expose the students to the industry, which we do for all three of our years of the professional chef's diploma. For times in between two to five weeks per year; actually we're increasing that now in between two and ten weeks next year because we see the value in what the industry has to do to play a role in the education. That means we are sending our first year students out to contract catering units, which we do, and they are using convenience products, or if they go into Michelin star restaurants and they are using convenience products, you bet your bottom dollar they do there as well. Curriculums feature convenience ingredients to a certain degree on specific programs like Level 2 [intermediate] of the Vocational Regional Qualifications (VRQ) and there is quite an emphasis on convenience at level 1[foundation] as well but not so much at level 3,[diploma]. Convenience ingredient usage is embedded into it without people [students] recognising it'.</p>
<p>10. Generally speaking from the typologies below, how best would you describe yourself as a chef? (more than one response may be appropriate)</p>	<p>P. You can tick every one of those. It's always down to circumstance but it's down to influence as well. I was influenced right from an early age when I first started in the industry, everything was traditional and everything was classical. Very quickly you pick up other influences, whether they're books, TV programs, working with other chefs, doing competitions, travel abroad, where these other influences will come in. They could be entrepreneurial influences, they can be contemporary influences, and they can be pragmatic influences. They're there. But you're right, you adapt those strings</p>

	to your bow for every instance you are in and every issue you need to deal with.
11. Knowledge of professional convenience ingredients available for use in your kitchen/kitchen classroom. Please indicate if you are using or have used them in your kitchen or college kitchen classroom by ticking, yes, no or not heard of.	I. The culinary director was familiar with all the ingredients
12. What statement do you believe best represents the type of convenience at Q11?	P. Professional convenience ingredient - because I've used them in a professional sense; I also realise they can be used within the household as well but generally I've used them more for professional reasons in terms of consistency and quantity.
13. Measuring ingredient preference:	I. The participant was asked to answer five questions in this category. Of the five a, g, j, n and s Gary agreed or strongly agreed for all except being uncertain for g. For Q g he answered; 'Of consistent high quality, yes, but they don't have to be a major brand'.
14. Measuring acceptable levels of usage of convenience acceptability:	Convenience ingredient usage is acceptable for high volume banquet catering usage? P: Highly acceptable. I: In times of chef skill shortages? P: Highly acceptable. I: Where food safety is an issue? P: Highly acceptable. I: Enhancing the flavour of freshly prepared recipes? P: Acceptable.
15: Measuring the attitudes and barriers to professional convenience ingredients	I: This college chef lecturer culture is against the usage of convenience ingredients? P: I think there's a fear factor with this. Generally the college lecturer is not against the use of convenience ingredients, I think that your average chef lecturer understands the use of and is perhaps unconscious to some of the uses, such as marzipan. It's under perception that they are worried about if they teach that commodity as a lesson and the student goes out into industry and the chef says to them "what'd you do at college yesterday?", "I learned how to make

	<p>convenience stocks” “Oh, what are they teaching you at college these days!” And that’s the scenario. That’s the issue that I alluded to earlier that we wouldn’t necessarily shout about what we’re teaching in the curriculum. But if someone’s going to ask me the questions, I’m very happy to back it up with the reasons why. I don’t think the college lecturer is against it.</p> <p>I: Professional convenience ingredient awareness is good for general student culinary knowledge?</p> <p>P: Yes, definitely.</p> <p>I: Professional convenience ingredients usage encourages the deskilling of professional chefs?</p> <p>P: That’s quite a debatable point. I’d love to be able to use that question for our gastronomic society.</p> <p>I: When do you have that?</p> <p>P: Every year, the students will sign up to become members of our gastronomic society and we do various events out in the industry and guest lecturers come in. Every now and then we will have a debating society; that’s a fantastic question. I see both sides to this.</p>
<p>16. Knowledge of Modern professional Ingredients in culinary education</p>	<p>I: My culinary knowledge would benefit from updates and insights into the usage of professional convenience ingredients? It ranges from strongly agree, agree, uncertain, disagree, strongly disagree.</p> <p>P: Strongly agree.</p> <p>I: Professional convenience ingredient awareness should form part of awarding bodies and catering college curriculum.</p> <p>P: Strongly agree. And it does to a certain degree on specific programs like Level 2 on the VRQ, I believe, there’s quite an emphasis, I think even at level 1 there is as well. Not so much at level 3, but it’s embedded into it without people recognising it.</p>
<p>17. Industry Convenience ingredient suppliers and manufacturers should undertake more training and development of their products.</p>	<p>Participant agreed with a-e</p>
<p>18. Definition of professional Convenience Ingredients</p>	<p>I. What definition do you believe best defines convenience ingredients as used in the modern</p>

	<p>professional kitchen?</p> <p>P. Wow, I really do agree with F, any fully or partially prepared food ingredient which significant...</p> <p>That's a good one. D focuses a little more on labour costs, saving time and money and skill. E doesn't mention anything about costs on there, and for me that's quite an important issue. So I would agree with F and I would agree with D. I'll put one against F, but I'll put number two against D.</p>
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Appendix 7a

Name: Key informant 2 chef lecturer catering college London

Question	Key responses
1. How many years have you worked in the hotel/restaurant sector of the food and hospitality industry?	h. Other - 40
2. How many years have you worked at this college?	b. 6-10
3. How would you describe your job title?	e. Other Educational teacher
4. What culinary training scheme did you undertake to become a professional chef/chef educator/	a. Full time college apprenticeship
5. What professional Chef Qualifications have you attained? (one or more answers may be applicable)	a. City & Guilds Professional Certificate
6. What trainings schemes did you undertake to become a lecturer in food and hospitality? (One or more answers may be applicable)	a. Assessor award, f. Post Grad Cert in Edn (PGCE), h. Other – BA in Professional Education Studies
7. Are you a member of the following National/International Professional Chef Associations? (more than one response may be appropriate)	h. Pace and I. other – Academy Culinaire Francaise
8. Do you believe catering colleges should provide student chefs with more focus and direction related to the usage of modern professional convenience ingredients as currently practiced in the industry?	<p>P: Yes. In a similar way that industry is now heading, with manpower to costs, in much the same way colleges have been forced down that same route. Although certain awarding bodies still require the fresh product to be used, I think there is through pragmatic purposes a need to adopt in a similar way. I think in balance, and if you balance them correctly with home-made products you will end up with something that is very palatable and quite acceptable.</p> <p>I: Just to expand slightly to that question, do you think it might be more effective through teaching or awareness or a bit of both?</p> <p>P: I think if time allowed, we should be able to not only teach the pure way, how to make it yourself, but also how to become more adaptable with the use of convenience products. In saying that I think that the restriction on time, particularly here in the college in</p>

	<p>our restaurant environment, I know for sure that way is happening in the student refectory where there is a separate staffing and probably a separate ethos as to how that is achieved. I know that in the student refectory they tend to adopt as much as possible convenience, whereas in the student learning area, it's very much a combination of the two. If you wanted to put a percentage measure on it, I would say no more than 25% is convenience.</p> <p>P: In the kitchen classroom we would tend to use boullions, whereas in the student refectory they would tend to use a lot more product; marinades, sauces, etc. Even to the point of vegetables and other things.</p>
<p>9. How much attention does your college give to the teaching and usage of modern professional convenience ingredients as currently practiced within the food and hospitality industry?</p>	<p>P: Not very much credence in that respect; as previously stated it's more a need rather than demonstrating or comparing the differences.</p> <p>I: Given what you said previously, you said there is an opportunity to make young students more aware of what's happening on the outside, by the fact it is actually happening in your own refectory.</p> <p>P: Absolutely. I think perhaps there is a conflict between what we're being asked to deliver, between personal values or ethos towards the purity and to what is being expected in reality.</p>
<p>10. Generally speaking from the typologies below, how best would you describe yourself as a chef? (more than one response may be appropriate)</p>	<p>P: I think a bit of everything really. I think the idea of being traditional in terms of being a roux based sauce, is although it's okay to know, to an extent some of the applications down that particular road is past its sell-by date. I think that we have to move with the times.</p>
<p>11. Knowledge of professional convenience ingredients available for use in your kitchen/kitchen classroom. Please indicate if you are using or have used them in your kitchen or college kitchen classroom by ticking, yes, no or not heard of.</p>	<p>I: Paste bullion, stock, formed bases</p> <p>P: Yes.</p> <p>I: Liquid gravy bases.</p> <p>P: Yes.</p> <p>I: Oriental, Asian pastes for sauces and marinades.</p> <p>P: Yes.</p> <p>I: European pastes for sauces and marinades.</p> <p>P: Hmm, yes, I think I am.</p> <p>I: Dairy cream alternatives.</p> <p>P: Yes.</p> <p>I: Powdered vegetable gelling agent texturisers.</p> <p>P: Yes.</p> <p>I: Desert fruit pastes.</p> <p>P: Yes.</p> <p>I: Dairy pastes.</p> <p>P: No.</p>

	<p>I: Okay, so what you're saying is you're familiar with those; have you used most of those at some point?</p> <p>P: At some point, yes.</p>
<p>12. Ingredient What statement do you believe best represents the type of convenience at Q11?</p>	<p>P: I noticed that in your list you've got professional convenience ingredients and then there are the TV adverts with Marco-Pierre White, and more of a professional perspective...</p> <p>I: You believe he adds a professional perspective?</p> <p>P: I believe he adds a professional perspective, if he's been seen using these products...</p> <p>I: It gives a bit of credibility?</p> <p>P: And legitimisation, as far as that's concerned.</p> <p>I: You've chosen pre-prepared ingredients of convenience, any specific reasons why that appealed?</p> <p>P: I think that encapsulates how my view is towards convenience foods in general.</p>
<p>13. Measuring ingredient preference:</p>	<p>I prefer using ingredients that are easy to prepare and cook quickly, do you agree, strongly agree or disagree?</p> <p>P: Agree.</p> <p>I: I prefer using ingredients that are fresh and unprepared.</p> <p>P: Agree.</p> <p>I: I prefer using ingredients that reduce food costs.</p> <p>P: Agree.</p> <p>I: I prefer using ingredients that are major brands of consistent high quality.</p> <p>P: Agree.</p> <p>I: I prefer using ingredients that are gluten-free.</p> <p>P: Neither agree nor disagree.</p>
<p>14. Measuring acceptable levels of usage of convenience acceptability:</p>	<p>I Convenience ingredients usage is acceptable for high volume banquet catering usage?</p> <p>P: Acceptable.</p> <p>I: Professional convenience ingredients usage is acceptable in times of chef skill shortages.</p> <p>P: Definitely acceptable.</p> <p>I: Where food safety is an issue?</p> <p>P: I think this is where the use of bullions comes into play here. I think yes, it's quite acceptable.</p> <p>I: Finally, enhancing the flavour of freshly prepared recipes.</p> <p>P: Acceptable.</p> <p>I: Is there any other area where you believe the use of convenience ingredients is acceptable in relation to</p>

	<p>every-day circumstances in today's modern kitchen?</p> <p>P: It's a cost saver. Not necessarily just in ingredients, but in labour costs.</p>
<p>15: Measuring the attitudes and barriers to professional convenience ingredients</p>	<p>I: The chef lecturer culture within this college would be generally against the use of convenience ingredients?</p> <p>P: Disagree.</p> <p>I: You would disagree with that. Disagree or strongly disagree?</p> <p>P: Disagree.</p> <p>I: The management culture in this college is against the usage of convenience ingredients?</p> <p>P: Disagree.</p> <p>I: Convenience ingredients awareness is good for general student knowledge.</p> <p>P: Strongly agree.</p> <p>I: Professional ingredient usage encourages the de-skilling of professional chefs.</p> <p>P: Agree.</p> <p>I: Is there anything you might like to expand on that agreement in general about the deskilling?</p> <p>P: Yes, that particular aspect has come up before with some work experience I did at the Ritz, I know the chef really well. When he first went there, there was a butcher and a separate fishmonger, prior to that he was at Claridges as well where they operated the same way. I think there was a move towards buying ready prepared products to a higher specification in order to reduce the staffing costs and also to reduce the wastage that is incurred in producing those final products. I know from another friend who worked in the Lake District who is now not a chef any more, he's a driving instructor, initially when he left hotel work; he went to work for his butcher as the French-style butcher, preparation person. To answer the question, yes I think it does deskill.</p> <p>I: If I put an alternative question, that convenience usage supports the reskilling and development of professional chefs, how would you view that question?</p> <p>P: I would tend to disagree with that statement.</p> <p>I: Disagree, or strongly disagree?</p> <p>P: Strongly disagree.</p> <p>I: Any specific reason?</p> <p>P: Unless you can give me an example, and I can't visualise an example, I fail to see how that's going to</p>

	develop work skills.
16. Knowledge of Modern professional Ingredients in culinary education	<p>I: do you have limited knowledge of professional convenience ingredients as used in the industry today?</p> <p>P: I think there is a need for product manufacturers to get out and be able to sell their products in a more professional application. For example, you could go out around the country and host different seminars to demonstrate the usage of certain products.</p> <p>I: Just to come back to that question, do you believe you have a limited knowledge of convenience ingredients as used today in the industry?</p> <p>P: In relative terms, no, but I think it could be developed further.</p> <p>I: Okay, so you disagree but it could be developed further. Would your culinary knowledge benefit from regular updates and insights into the usage of convenience ingredients?</p> <p>P: I agree with that.</p> <p>I: Do you believe convenience ingredients awareness should form part of awarding bodies and catering college curriculums in courses?</p> <p>P: Absolutely.</p>
17. Industry Convenience ingredient suppliers and manufacturers should undertake more training and development of their products.	Interviewee ticked boxes a-e.
18. Definition of professional Convenience Ingredients	<p>I: This question is designed to measure your understanding of the definition of convenience ingredients. Below there are six definitions, I'm going to pass the sheet to you. If you could read those definitions, think about them, but pick one you believe most defines convenience as we've discussed it in this interview.</p> <p>P: G.</p> <p>I: You've gone for G. So, G, if I can read that out to you and illicit a small response. "Those ingredients that meet the culinary needs and convenience of the professional chef at the right time and for the right occasion without compromising consistency and high quality standards of the finished food product." What was the reason for you choosing it?</p> <p>P: I think the last statement was one which encapsulated my views towards the use of convenience ingredients. Seeing as I have a history</p>

	<p>of fresh, I think that as we mentioned before there needs to be a balance struck with reduction in time and cost.</p> <p>I: So you're saying you accept there is a time and a place providing there is no compromise on consistency?</p> <p>P: Yes, I think the use of convenience needs to be a blend. Whether I was still in the industry or I'm here in a teaching environment, I think there is a need to be able to blend when it's appropriate and to maintain the qualities stipulated.</p>
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Appendix 7b

Key Informant 3 – Culinary chef director four and five Star hotel group

Question	Key responses
1. How many years have you worked in the hotel/restaurant sector of the food and hospitality industry?	F, 25-30 Years
2. How many years have you worked as a food service chef consultant	F, 25-30 Years
3. How would you describe your job title?	Catering Director
4. What culinary training scheme did you undertake to become a professional chef/chef educator/	B Part Time College Apprenticeship
5. What professional Chef Qualifications have you attained? (one or more answers may be applicable)	A , City & Guilds Professional Certificates
6. What additional culinary development have you undertaken to enhance your professional qualifications?	A, Work experience with a Michelin Starred Chef and B, Work experience with a Michelin Starred Restaurant
7. Are you a member of the following National/International Professional Chef Associations? (more than one response may be appropriate)	H, PACE
8. Do you believe catering colleges should provide student chefs with more focus and direction related to the usage of modern professional convenience ingredients as currently practiced in the industry	P: There needs to be an understanding of the definition of convenience and how convenience can be used. I think the perception is that convenience is short-cut, it is moving away from doing things properly. I think that in today's environment, convenience food is much better quality than it has been and it continues to develop and evolve. They need to understand what convenience is and how that is defined. I think there are different stages of convenience as well. In my mind, there is finished convenience and base convenience.
9. How much attention does your hotel/restaurant give to the usage and development of professional convenience ingredients within your recipes and menu development?	P: Not enough is the answer. It's not enough, it's a little. Our focus as a business has been about working with whole raw ingredients and developing food from whole raw ingredients but in my mind, convenience has a part to play in certain elements of our business and has certain uses. Again, it comes back to understanding the

	<p>definition of convenience.</p> <p>P: When we talk about convenience I think people think that convenience means a finished product that you pick up out of a freezer, drop it in a microwave, reheat it and serve it. That is people's overall perception of convenience, whereas I see convenience broken down into different levels. I'm giving you the complete finished product but I believe it's got a base use and there are grades in between that.</p>
<p>10. Generally speaking from the typologies below, how best would you describe yourself as a chef? (more than one response may be appropriate)</p>	<p>P: Well I'd like to think I've got elements of all; I've got elements of tradition because I was trained as a traditional chef and there are certain things I believe should remain traditional and there are certain things I believe should have elements of contemporary. Master chef I'm not really sure what that means!</p> <p>P: I've been a master chef of Great Britain, but I wouldn't necessarily define myself as a master chef. Entrepreneurial, yes at times I'd like to think I'm entrepreneurial; pragmatic, yes; at times I'd like to think that. Adventurous, I can be adventurous but I like to have something sitting behind that adventure that supports. I'd like to think I've got elements of all of that.</p> <p>P: We don't get a mixture all of the time. To be honest with you, some of those, we might weight some of those requirements more heavily in certain hotels than in others. Chefs need management, in some hotels they need a large amount of management in others we need someone who is a real cook; who has real skill, real passion, we need them to manage, but we need them to cook more than they manage. Sometimes you balance that out with their team, you'd be saying to them "you need a great team to be a kitchen manager, we want you to be a great cook".</p>
<p>11. Knowledge of professional convenience ingredients available for use in your kitchen/kitchen classroom. Please indicate if you are using or have used them in your kitchen or college kitchen classroom by ticking, yes, no or not heard of.</p>	<p>P: I'll give you an extreme example; you know when I'm talking about layers of convenience? I see olive oil as a convenience, because if you say olive oil as opposed to going out and collecting olives and pressing them that is a convenience. Buying peeled potatoes is a convenience, buying frozen peas is a convenience, but a lot of those things we've accepted as being acceptable and it's understanding where that acceptable base is.</p> <p>P: I hadn't heard of dairy pastes to be fair. Alcohol pastes, yes I've heard of them, but no I haven't used them. Nut pastes yes I've heard of them, yes I've used them.</p>

12. What statement do you believe best represents the type of convenience at Q11?	Key informant 3 was not questioned on this option.
13. Measuring ingredient preference:	<p>I: I'm just going to ask two or three of these so that at the end of it you can tick all the ones. I'm just going to take a couple out to see that I'm going in the right direction. Again, I prefer using ingredients that are fresh and unprepared?</p> <p>P: Generally speaking, yes.</p> <p>I: Support reduced labour costs?</p> <p>P: In some cases, yes. That would be a good reason to use it.</p> <p>I: Support sustainability in the kitchen?</p> <p>P: Yes, that's becoming more and more relevant for environmental reasons.</p> <p>I: Are easy to order from my suppliers?</p> <p>P: Yeah, to be fair, if it's something we think that we need then we make it happen, we make it available.</p> <p>I: Are major brands of consistent high quality?</p> <p>P: Yep. They are important.</p> <p>I: Are distributors own label of variable quality?</p> <p>P: Yes, generally speaking.</p> <p>I: Low in salt?</p> <p>P: Yes.</p>
14. Measuring acceptable levels of usage of convenience acceptability:	<p>I: Professional convenience ingredients usage is acceptable for high volume banquet event catering usage?</p> <p>P: Yep, depending on what it is and what it's for.</p> <p>I: In times of chef shortages?</p> <p>P: I prefer to find a solution to the chef shortages.</p> <p>I: Is it acceptable when the equivalent fresh ingredients are unavailable?</p> <p>P: I think that shouldn't be a reason to use them. I think you should be menu planning so that you have already thought that through before you do a menu. If you're in that position where you've got something on a menu and you have to compensate with pre-prepared stuff then you haven't thought through your menu.</p> <p>I: Professional convenience ingredient usage is acceptable for the enhancement of flavour of freshly prepared recipes.</p> <p>P: It can be, yes. I agree with that.</p>
15: Measuring the attitudes and barriers to professional convenience ingredients	<p>I: Is the hotel group against the use of professional convenience? Is the culture against it?</p> <p>P: Sometimes it can be. I wouldn't say it's a culture, I'd say it's the knowledge. The knowledge is lacking. If it's</p>

	<p>not acceptable, it's because the knowledge is not there.</p> <p>I: The hotel restaurant group management culture is against the use of professional convenience ingredients?</p> <p>P: No.</p> <p>I: Professional convenience ingredients awareness is good for general culinary knowledge.</p> <p>P: Yes. It is. It has a place. It all goes back to the definition of convenience. As soon as you mention the word convenience, people default to extreme examples of convenience, where something is coming in completely prepared and finished and doesn't deliver as good a quality product as if it was fresh. I'll give you a couple of examples; I insist that our chefs don't make their own bread. That, to me, is a convenience, bread is a convenience product. The reason why is because we don't have the skill, don't have the equipment, don't have the technology and now you can buy extremely good quality bread and as long as you manage it right and handle it correctly, it's more consistent, etc. and I have the same view on petit fours if you're buying great petit fours even pasta.</p> <p>I: Professional convenience ingredients usage supports the reskilling and professional development of chefs?</p> <p>P: Well, that's where there is an argument. By insisting on guys not making their own bread, you are taking away that skill. I also believe that whilst it is nice to stick onto those traditional basics and know that skill, I believe you have to move with the times. If you don't move with the times, what we're saying to guys now is we want you to transfer your skills from making bread into doing other things that will make a point of difference. So the consumer will see that this is something that's been finished, that there is skill being managed at a local level and the base is lifted. The base of all convenience is lifted. Quality of convenience today is far superior to what it was 10, 15 years ago. The reason why it has a bad reputation is because 10, 15 years ago convenience was a short-cut. Convenience was a third-rate product.</p>
<p>16. Knowledge of Modern professional Ingredients in culinary education</p>	<p>I: My professional culinary development has prepared me to understand and use professional convenience ingredients?</p> <p>P: No is the answer to that. When I was educated professionally, it was 25 years ago, and was that part of my training? It didn't come into it, so the answer is no.</p> <p>P: My own personal development and education has</p>

	<p>forced me to learn more about it, but it's certainly not something that was part of my own classical traditional training.</p> <p>I: Do you believe that your culinary knowledge would benefit from insights and updates into professional convenience ingredients?</p> <p>P: Yep.</p> <p>I: Do you believe that potentially, the knowledge of that could form part of an accredited continual professional development program within the industry?</p> <p>P: Yes. I don't know the answer to that, but what I would like to see is that it should form part of the criteria and be integrated into the criteria.</p> <p>I: professional convenience ingredient awareness should/could form part of catering college curriculums and courses.</p> <p>P: Yeah.</p>
<p>17. Industry Convenience ingredient suppliers and manufacturers should undertake more training and development of their products.</p>	<p>The participant agreed with all statements</p>
<p>18. Definition of professional Convenience Ingredients</p>	<p>P: If I describe to you what I think, in my mind, convenience has a number of different values within the workplace. That value could be to save time, to save energy, to enhance the good product to make it a great product. I think that it has a benefit to all of those things. Depending on where you are looking to use that, some of those will have more value than others. If I give you the two extremes to try and help my definition; Marco-Pierre White said that when he used to make his soups, when he was cooking at three-star Michelin level, he used to enhance his soups with bullion. That's the extreme example of where he used to lift a good soup to a great soup.</p> <p>I: Is that acceptable?</p> <p>P: It obviously was acceptable because if someone can achieve three Michelin stars and be using bullion, then that, in my mind discounts any illusions of convenience being a third or second rate product. That's at one end, the other end is that it may be necessary to use convenience, in other types of environment where you do not have the equipment, do not have the skill or do not have the time. My personal view is you should never compromise the end product. What you've got to do is take each scenario individually and say "what is the best way of achieving the best product in this</p>

	<p>environment?” Sometimes that will be using a large portion of convenience, and in some cases it will be using a small part of convenience, but it will be there to lift and finish a product. That’s the way I would do it. I don’t know whether there is a definition there that covers that...</p> <p>P: In summary, as a professional chef, you have to open your eyes to convenience and you have to make a business decision in the interest of the customer and what is going to give them the best quality finished product of how much of a role convenience plays.</p>
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Appendix 7c

Key Informant 4 Executive chef De Vere Hotel

Question	Key responses
1. How many years have you worked in the hotel/restaurant sector of the food and hospitality industry?	P: I actually started when I was 14, still at school working evenings and weekends, let's work that back, so 37 years now.
2. How many years have you worked at this hotel?	P: I actually opened the hotel about 16 years ago then I stayed for four before I went out to pursue my own establishment and work for myself. Then it's eight months ago I was enticed back, my second stint is eight months and my first was four years.
3. How would you describe your job title?	P: Executive head chef.
4. What culinary training scheme did you undertake to become a professional chef/chef educator/	P: A full-time apprentice with British Transport Hotels which really took on five years, the first four years you do your 7061 and your 7062 whilst spending six months in all the sections, then in your fifth year you became a chef.
5. What professional Chef Qualifications have you attained? (one or more answers may be applicable)	P: 706's, one, two and three
6. What additional culinary development have you undertaken to enhance your professional qualifications?	P: None. None on that.
7. Are you a member of the following National/International Professional Chef Associations? (more than one response may be appropriate)	P: World Association of Chefs (WACS) is a definite I: Master Chefs of Great Britain? P: I was. I: Any others? P: No
8. Do you believe catering colleges should provide student chefs with more focus and direction related to the usage of modern professional convenience ingredients as currently practiced in the industry	P: Yes, I think they've got to understand they're not all going to end up in establishments which have the benefits of preparing their own stocks and sauces. It should be part of the curriculum that they know how to use them correctly. I: Have you done any work with colleges recently? P: We've done a few dinners with the students. I: How much attention does your hotel restaurant give to the usage and development of professional convenience ingredients within your recipes and menu development?

	P: I would say a moderate amount.
9. How much attention does your hotel/restaurant give to the usage and development of professional convenience ingredients within your recipes and menu development?	P: I would say a moderate amount.
10. Generally speaking from the typologies below, how best would you describe yourself as a chef? (more than one response may be appropriate)	P: A and B. Traditional and contemporary. I don't like the word master chef in this country because there's no real acclaim for being a master chef unless you join the Master Chefs of Great Britain. That's probably one of the reasons I gave it up, because you have to pay to be a member. In other countries, there is a master chef's exam which we're trying to get over here with WACS, but also with City and Guilds.
11. Knowledge of professional convenience ingredients available for use in your kitchen/kitchen classroom. Please indicate if you are using or have used them in your kitchen or college kitchen classroom by ticking, yes, no or not heard of.	<p>I: I would suggest that you probably know paste bullions, stocks, fond bases and you have used them?</p> <p>P: Yep, liquid.</p> <p>I: Powdered?</p> <p>P: Yes.</p> <p>I: Jus bases?</p> <p>P: Yes.</p> <p>I: Powdered granule jus base?</p> <p>P: Yep.</p> <p>I: Paste gravy base?</p> <p>P: I'm sure I've come across it, and I definitely know a powdered gravy base.</p> <p>I: Okay. Liquid yes?</p> <p>P: Yes.</p> <p>I: Indian paste?</p> <p>P: Yes.</p> <p>I: Oriental?</p> <p>P: Yes.</p> <p>I: African?</p> <p>P: Yeah.</p> <p>I: American, or Americas paste for sauces and marinades?</p> <p>P: Yeah.</p> <p>I: European pastes?</p> <p>P: Yeah.</p> <p>I: Herb purees?</p> <p>P: Yes.</p> <p>I: Roux?</p> <p>P: Yes.</p> <p>I: Low fat margarine spread?</p> <p>P: Yeah, yeah.</p> <p>I: Dairy cream alternatives?</p>

	<p>P: Yeah. I: Mayonnaise? P: Yeah. I: Oil based dressing? P: Yes. I: Powdered vegetable gelling agent texturisers? P: No, doesn't spring to mind, what is it? I: It's coming through with molecular gastronomy. P: I know gelling gum I: Okay. That probably puts you as a yes I: Dessert fruit pastes? P: I'm trying to think... as in? I: Similar as, I would have said, bullion paste? P: No. I: Dohler Foods do them, and companies like that. P: Oh, right, yes. And Sosa. Why I'm hesitant there, is because I'm trying to think of the normal things on the shelf that I'm using, We buy a lot of that with MSK and Sosa. I: MSK also do the gelling agent texturisers. Dessert fruit powders? P: Yes. I: Okay. Dairy pastes? P: No I: There are caramel pastes, the Germans use them a lot, and they come in from Dohler. It's similar to a fruit paste, but dairy based. Caramel is one of the main ones that are in there. I: Nut paste? P: Yes. I: Alcohol pastes? P: Yes.</p>
<p>12. What statement do you believe best represents the type of convenience at Q11?</p>	<p>The word I'm looking for is enhancing, but it's not there. I: It's something that we can add, whatever you think down at the bottom. P: Yeah, some of those. Right, H; manufactured pre-prepared convenience ingredients. I: H, okay. Any specific reason that appeals to you more? P: I just think it's the one that stands out the most.</p>
<p>13. Measuring ingredient preference:</p>	<p>I: I prefer using ingredients that are easy to prepare? P: Agree. I: Support waste reduction in the kitchen? P: Agree. I: Are a mixture of fresh and convenience? P: I suppose, on a quieter week I might disagree. I: Okay. Are major brands of consistent high quality? P: Yeah, strongly agree.</p>

	<p>I: Are low in salt? P: Disagree. I: Any particular reason why? P: It's not something that I would consider when using them. As long as the recipe is right.</p>
<p>14. Measuring acceptable levels of usage of convenience acceptability:</p>	<p>I. Professional convenience ingredient usage is acceptable for: I: High volume banquet event catering usage? P: Highly acceptable. I: In times of chef skill shortages? P: Acceptable. I: In times of recession? P: How does it affect us? I: With the recession, it might mean you're not getting the customers coming through the door so you might not have the ability to take on so many staff. P: Unacceptable. I: When equivalent fresh ingredients are expensive? P: Unacceptable. I: As a backup for general food shortages? P: Unacceptable. I: Enhancing the flavour of freshly prepared recipes? P: Highly acceptable. I: Okay. What would the difference be between that being acceptable but not as a backup for food shortages? P: Because I tend to use them more as an enhancer. I: On a regular basis? P: Oh yes. I: So, rather than make up a bouillon from a paste you would add the paste to the dishes? P: Yes, and you've seen Marco on television with his Knorr, and he puts it onto his steak. We put a fingerful into the purees. You've chopped the carrots up, half a pound of butter in there, fingerful of chicken bouillon, cook it in a steamer, and liquidise it, perfect. It's an enhancer. I: And you use that puree for? P: Drags and pulls. I: Just a garnish on a plate? Interesting. P: There you are there's an enhancer.</p>
<p>15: Measuring the attitudes and barriers to professional convenience ingredients</p>	<p>I: The hotel restaurant chef culture is against the use of professional convenience ingredients? P: Strongly disagree. I: The hotel management culture is against the use of professional convenience ingredients? P: Strongly disagree, they don't get involved. I: So as long as the food's good, the costs are right...</p>

	<p>P: Yeah, the margins are right.</p> <p>I: Using professional convenience ingredients is seen by my peers as degrading my culinary craft Skills?</p> <p>P: Not any more. Strongly disagree.</p> <p>I: But it has been a factor?</p> <p>P: I think there was a stigma attached to it years ago. I remember going to a chefs meeting a long time ago, well, not that long ago, we were having this meeting, discussing bits and pieces and it turned out after this discussion I was the only chef still making mayonnaise. There were a lot of chefs and I was the only chef making mayonnaise. I went away from there and though “yeah, why the hell am I still making it?” From that day on, I started buying it.</p> <p>I: Do you think, perhaps, celebrity chefs may have an influence on acceptability? You mentioned Pierre White.</p> <p>P: It might influence the younger chefs, but that advert is more for households, rather than industry. I think it helps the brand, selling the brand, not necessarily the convenience of it. I think what’s happened more now in our industry is labour costs.</p> <p>I: That’s why there’s perhaps more usage of convenience?</p> <p>P: Yeah. Labour’s one of the biggest issues now. We were hammered every week on our wage budget. When we were trained, apprentices and commis’ were paid next to nothing. They’re not on a fortune now, but it’s a lot more than what we were on years and years ago.</p> <p>I: Okay. A couple more questions on this one; Professional convenience ingredient usage supports variety of choice?</p> <p>P: Yes, definitely because of the mixture of flavours and bringing the ethnic and American into your kitchen. I’ve got a booking in a couple of weeks’ time where I’m using your recipes from the tube. I’ve just photocopied them and given them to the boys. It’s a big booking, so it’s great, and it’s a fantastic recipe.</p> <p>I: Professional convenience ingredients usage supports the reskilling and development of professional chefs?</p> <p>P: Uncertain about that one.</p> <p>I: Okay, let me put it another way. Professional convenience ingredients usage encourages the deskilling of professional chefs?</p> <p>P: To an extent, yes.</p> <p>I: Why? It’s interesting that you’ve gone a little bit further this way. You use them yourself.</p> <p>P: It’s going back to page one where I’m traditional.</p> <p>I: This is your traditional side coming out.</p> <p>P: Okay, we’ll stick to the middle and go to “uncertain” but yeah, I’m edging more on disagreeing, just slightly.</p>
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<p>16. Knowledge of modern professional ingredients in culinary education</p>	<p>Key informant 4 was not questioned extensively on this area but believed that such educational development should be taking place.</p>
<p>17. Industry Convenience ingredient suppliers and manufacturers should undertake more training and development of their products.</p>	<p>I: I have limited knowledge of professional convenience ingredients as used in current industry practice? P: Nobody has ever come into the kitchen to show me, apart from the recipes that we did for your conference, so I do feel I have limited knowledge, in a way, of how to use them correctly. I: So you would strongly agree with that then? P: Yeah, I think if you knew more about them and you had a little bit more training on them, you would use them more. I: My professional culinary development has prepared me to understand and use professional convenience ingredients? P: Agree. I: Professional convenience ingredient awareness knowledge should form part of an accredited continuous professional development program? P: Yes, strongly agree. I: Professional convenience ingredient awareness should form part of catering college professional cookery curriculums? P: Strongly agree. I: Industry convenience ingredient suppliers and manufacturers should undertake more training and development of their products through:</p> <ul style="list-style-type: none"> a) Through bespoke in-house training courses; b) Training development; c) Bespoke hardware concept packages; d) Online recipe and menu software packages; e) Nutrition healthy diet and menu healthy packages; f) No specific interest in any external supplier or manufacturer support? <p>P: All of them, apart from the bottom one.</p>
<p>18. Definition of convenience ingredients</p>	<p>I: This is trying to define what convenience ingredients are in our industry today. I have put together seven definitions and I'd like you to read them from A to G and then take as much time to think about it, but tell me what your preferred one is and perhaps maybe expand on it. If you'd like just to read those. P: D I think. I: D is those that which the chef is inclined to agree save on time, money and skill and labour costs in regard to meal preparation. Is that, then what attracts you more, the saving on time, money? P: With my traditional hat on, yeah. It's being used as enhancement rather than a full-blown menu, but there's</p>

	<p>also without compromising consistency.</p> <p>I: What one was that?</p> <p>P: That's the last one.</p> <p>I: Okay. Those ingredients that meet the culinary needs and convenience of the professional chef at the right time and for the right occasion without compromising high quality and consistency standards.</p> <p>P: You're not mentioning staffing levels for the last one.</p> <p>I: If you read into that "Those ingredients that meet the culinary needs and convenience" so that could mean the staffing levels. "For the right time and for the right occasion" I suspect what I've done here is try to encompass all of those ones in there. That's all the questions. Is there anything else that you might like to add in general about convenience in the industry for whatever reason? Is it going to get bigger?</p> <p>P: I'm sure it's going to get bigger. I think our biggest problem in this industry is the actual labour and the labour costs. Especially with everybody trying to fight to get the right margins, the right revenue.</p> <p>I: Is it a case of trying to get high skilled chefs but not prepared to pay the salary?</p> <p>P: Not that you can pay the salary, that's the problem.</p> <p>I: You can't?</p> <p>P: Not when margins are so tight and labour costs so high.</p> <p>I: Is that then an opportunity for convenience to support rather than take over?</p> <p>P: Definitely support. That's why I keep going back to the word "enhancing". Enhancing your menus, enhancing your kitchen, enhancing your recipes with little bits like that.</p> <p>I: Anyway, thanks very much for that. That's the end of the questions</p>
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Appendix 7d

Key Informant 5 chef consultant with five star hotel and college lecturer experience

Question	Key responses
1. How many years have you worked in the hotel/restaurant sector of the food and hospitality industry?	30-35
2. How many years have you worked as a food service chef consultant	6-10
3. How would you describe your job title?	Master Chef
4. What culinary training scheme did you undertake to become a professional chef/chef educator/	A and b – full and part time apprenticeship
5. What professional Chef Qualifications have you attained? (one or more answers may be applicable)	City and Guild Professional Certificates
6. What additional culinary development have you undertaken to enhance your professional qualifications?	a, b, c and d -
7. Are you a member of the following National/International Professional Chef Associations? (more than one response may be appropriate)	Federation Chefs Scotland and C Master Chefs of Great Britain
8. Do you believe catering colleges should provide student chefs with more focus and direction related to the usage of modern professional convenience ingredients as currently practiced in the industry	P. Yes - Most colleges teach the fundamental basics, which are correct to teach, but the realism of transferring these skills to the actual practical workplace where there is no longer big kitchen brigades. It's a lot of financial focus and profitability and customer satisfaction. What you find is they need to be able to incorporate some of those long process times which are provided in convenience form, enhance and embellish and still get the same effect without the same time element. A lot of the convenience products, if you want to call them convenience, have been produced by a lot of good talented people in the first instance. It's already a good product which can be tailored to suit the needs in the workplace.

<p>9. How much attention does your hotel/restaurant give to the usage and development of professional convenience ingredients within your recipes and menu development?</p>	<p>I. The chefs answer was a moderate amount from his previous experience of working in hotels and restaurants</p>
<p>10. Generally speaking from the typologies below, how best would you describe yourself as a chef? (more than one response may be appropriate)</p>	<p>P. I think the ideal chef is a mix of all of these. I think they have to understand how it can be made from scratch and have to understand what's out there to allow them to be flexible enough to control it. They have to be entrepreneurial, adventurous, and they have to be cutting edge. The best dessert on the planet is probably apple pie with vanilla ice cream and toffee sauce, so if you want to make money on a great dessert you have to recreate apple pie, vanilla ice cream and toffee sauce in a different fashion; because you're adventurous and entrepreneurial you'll create a fabulous dish. I would say that the best of chefs nowadays is somebody that's got all these attributes but you can apply the appropriate attitude to the right scenario.</p>
<p>11. Knowledge of professional convenience ingredients available for use in your kitchen/kitchen classroom. Please indicate if you are using or have used them in your kitchen or college kitchen classroom by ticking, yes, no or not heard of.</p>	<p>I. He was familiar with all the ingredients except dairy and alcohol pastes and gelling agent texturisers</p>
<p>12. What statement do you believe best represents the type of convenience at Q11?</p>	<p>P. There are probably a lot of answers for that one, isn't there? I would do that one. The professional convenience ingredient. I'll stick with that.</p>
<p>13. Measuring ingredient preference:</p>	<p>I: I prefer using ingredients that are easy to prepare and cook quickly? P: Yeah, okay. I can agree with that. I: Are fresh and unprepared? P: I don't necessarily agree with that. You can buy a lot of things in that somebody has already scaled and filleted it. I: That would be a disagree? I: Help to reduce food costs? P: I strongly agree with that. I: That are major brands of consistent high quality? P: I would say yes, I agree with that. I: Are gluten free?</p>

	<p>P: It's a big thing nowadays; the coeliac association is quite a big issue. How would I word it?</p> <p>I: You agree there's a need?</p> <p>P: Oh, definitely. I would go in there if that's alright.</p>
<p>14. Measuring acceptable levels of usage of convenience ingredients:</p>	<p>I: For high volume banquet catering usage?</p> <p>P: It's like everything really. You go back to the labour structure, what are we doing, how many boys have we got in the kitchen, what are we trying to control, is it the same team that is doing the restaurant and the banqueting, how do we need to be clever with this? Professional convenience ingredient usage is acceptable for high volume catering; I would say it is acceptable, I wouldn't say it was highly acceptable. You still need the personal touch of the chef enhancing and embellishing and making it special.</p> <p>I: In times of chef skill shortages?</p> <p>P: You need a consistent product going out there; I'd say it was acceptable.</p> <p>I: Professional convenience ingredients usage is acceptable if food safety is an issue?</p> <p>P: I would say so, if you were running an operation where something was an issue then you would have no option.</p> <p>I: Enhancing the flavour of freshly prepared recipes?</p> <p>P: Absolutely. No problem with that.</p>
<p>15: Measuring the attitudes and barriers to professional convenience ingredients</p>	<p>I: Would you have said that the hotel restaurant chef Culture was against the use of professional convenience ingredients?</p> <p>P: No. I wouldn't say we were. Yes, we made our own stocks and all that, but you can never make enough.</p> <p>I: So you would disagree with that one there?</p> <p>P: Yes.</p> <p>I: Using professional convenience ingredients is seen by my peers as degrading culinary craft skills?</p> <p>P: Some of them. They don't live in the modern world.</p> <p>I: Perhaps tradition oriented chefs?</p> <p>P: Yeah, I would say that if you're not adaptable to the modern chef environment; we're not talking about a Michelin star restaurant that's got the ability to charge £200 for a meal and they've got all the bodies and they're producing all the bits, if you look generally at the other 99.99% of the business you have to be flexible and adaptable. You get a lot of people teaching further education who have been teaching for the last 20 years and 20 years ago they did certain things and they haven't changed their ethos. They haven't looked at moving on in the industry because they don't work</p>

	<p>in the industry any more. They don't frequent the industry any more. I could do some stuff and someone from a college could say "that's a real cowboy trick", and I'd say "well, taste it".</p> <p>I: Quite a controversial question: professional convenience ingredients usage encourages the de-skilling of professional chefs?</p> <p>P: If you use it all the time. Every senior chef's role is to train and develop their team to try and create awareness of what they're trying to achieve. If that's saying "we make stock, but we've never got enough so we enhance it" or whatever. There's a role there for every senior chef to be able to do that. I think they're right to do that.</p> <p>I: The final one; professional convenience ingredients usage supports the reskilling and professional development of chefs?</p> <p>P: Yes, it does.</p> <p>I: That was quite equivocal.</p> <p>P: It does because it's changed, the world has moved on.</p>
<p>16. Knowledge of Modern professional Ingredients in culinary education</p>	<p>This is about culinary education; I know you've got an education background, you were a lecturer.</p> <p>P: Twelve and a half years at Glasgow College of Food Technology at the time.</p> <p>I: Okay. Professional convenience ingredient awareness should form part of accredited continuous professional development?</p> <p>P: In terms of understanding what it is?</p> <p>I: It could be within the workplace or it could be within the college.</p> <p>P: I think it should be within the college.</p> <p>I: That brings me onto the next question; professional convenience ingredient awareness should form part of catering college professional cookery curriculums?</p> <p>P: Yes.</p> <p>I: Okay. Do you want to expand at all on that?</p> <p>P: There are no longer 100 chefs in the kitchen, some kitchens run a brigade of maybe four or five to allow someone to get a day off, realistically. Therefore, you haven't got the bodies to produce all the peeling, all the chopping, all the bits and pieces, there has to be an awareness of what's out there that can make that life a wee bit easier. Again, not to defer or detract from the finished product. What you've got to remember is that the convenience products are no longer made by scientists playing with various chemicals; a lot of these</p>

	<p>products are developed by chefs who have already worked at Michelin level, have now crossed over and are working in development side of the business. These guys and girls are extremely talented at sourcing the ingredients, producing the product and then allowing us chefs to purchase it and use it in our own kitchens.</p> <p>I: It's interesting that you are aware of that, but how many other people are aware of that type of development that's going on in the industry?</p> <p>P: I don't know, when some of the products came out many years ago, they just weren't that good.</p> <p>I: They were heavy with salt.</p> <p>P: Heavy with salt, they weren't produced by chefs; they were produced by scientists in a laboratory. Now you've got very well-known professional chefs sourcing the ingredients and companies backing them to source the best ingredients they can get, put something together which is very creditable with the taste and flavours required in our restaurants today and again, very multicultural, lots of various ingredients globally being brought into the modern kitchen. These guys go there with great knowledge, skills and ability. They're so proud that they don't want to produce convenience product that would insult their reputations.</p>
<p>17. Industry Convenience ingredient suppliers and manufacturers should undertake more training and development of their products.</p>	<p>Participant agreed with a-e</p>
<p>18. Definition of professional Convenience Ingredients</p>	<p>I: The question is designed to measure your understanding of the definition of professional convenience ingredients and I've got a list here of seven definitions. I'd like you to take a look at them from A to G and then if you would tell me what definition most fits.</p> <p>P: G, the bottom one.</p> <p>I: Okay, you think that. Would you like to expand why you've chosen G, please?</p> <p>P: I would understand a convenience ingredient that is available to the chefs today are those ingredients that meet the culinary needs and convenience of the professional chef at the right time for the right occasion without compromising consistency and high quality standards.</p> <p>I: Is there anything missing from that, do you think?</p> <p>P: I think there might be something missing.</p> <p>I: If you can think, please write it down.</p>

	<p>P: C is very relevant. Those ingredients that take the time and activities of the preparation from the professional chef to the food processor. If somebody else is producing this for me, I can bring it into the kitchen and I can use it without that intensity of time and labour.</p> <p>I: G you prefer, but you see part of C fitting in.</p> <p>P: There's also by-products of skill and saving on labour, but basically, somebody else has done that for me to a very high standard, I'm delighted to use it in my kitchen because it will save me a lot of time and effort and ensure that my guys in my kitchen are not there all night producing this and they can have a reasonable lifestyle and I can retain my staff. What G is saying to me is that I would cut the cost to suit. If I've got a three rosette restaurant then every stock I make has to be a proper stock, reductions and all that sort of stuff. In the same hotel group I've got a wedding on for 150 people; I certainly would want to use a convenience product, I would like to enhance it, and you and I have done it before with red wine and redcurrant jelly and all that stuff and made a cracking sauce. I'm not adverse to taking some of that cracking sauce and blending it with my fresh one. I still think that enhances.</p> <p>I: So G, with an enhancement of C gives you the definition.</p> <p>P: I would say that G plus C equals happy chef. There are other elements of control and consistency and savings.</p>
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Appendix 7e

Key Informant 6 – executive chef Hilton hotel Scotland

Question	Key responses
1. How many years have you worked in the hotel/restaurant sector of the food and hospitality industry?	30-35
2. How many years have you worked as a food service chef consultant	1-5
3. How would you describe your job title?	C - Executive Chef
4. What culinary training scheme did you undertake to become a professional chef/chef educator/	B – full time apprenticeship
5. What professional Chef Qualifications have you attained? (one or more answers may be applicable)	A - City and Guild Professional Certificates and - Industry Recognised Culinary Arts Certificates
*6. What additional culinary development have you undertaken to enhance your professional qualifications?	A - Work experience with a Michelin Starred Chef and E - Culinary Art Degree s equivalent
7. Are you a member of the following National/International Professional Chef Associations? (more than one response may be appropriate)	F Federation Chefs Scotland, C Master Chefs of Great Britain and A WACS
8. Do you believe catering colleges should provide student chefs with more focus and direction related to the usage of modern professional convenience ingredients as currently practiced in the industry	I feel it wouldn't do any harm, because there are not many big companies that don't touch enhanced convenience product. I think it would help them understand how and why you have to look at certain products, especially when they join a company and get to understand about yieldage and different areas. More of a banqueting style place would have to tap into
9. How much attention does your hotel/restaurant give to the usage and development of professional convenience ingredients within your recipes and menu development?	P: It plays a fair part for the commercial side of it, for the banquet room it's more of an enhancer. I: When you say enhancer, what do you mean by that? P: For example a thickening agent - a thickening agent that helps to pull a stock into a sauce, helps the glossiness, the colour, the texture, that's the way I see it, but it's also got to be used the proper way. Yes, we have a few of the chefs that have been with the company a long time that understand the products

	<p>they're using. It's got it's usage in that area. For the rest of the area, yeah, it comes into it now and again, but maybe not the volume that we use in banqueting.</p>
<p>10. Generally speaking from the typologies below, how best would you describe yourself as a chef? (more than one response may be appropriate)</p>	<p>The top two for me, a traditional oriented chef and a contemporary oriented chef, because I was fortunate enough to get training many years ago, so I class that as a more traditional background but I also have to learn the contemporary way that food has changed. I could possibly say that would lead into the master chef side of it because I've developed the skills to be able to go and produce some decent food for a good restaurant and also for a banqueting product. I'm certainly not entrepreneurial because I did have my own business. Pragmatic? I will learn from the youngest guy in the kitchen as much as anybody else, if you're not then you're kidding yourself on. Adventurous? Yes, I've been fortunate enough to travel, so I do like the fusion style from many years ago, certainly some of that was great, different ways of being healthier, lighter, all that, so you picked up ideas there. Maybe a mixture of everything, certainly the top two for me is where I would fit in.</p> <p>I: They're your core areas? P: I would say so.</p>
<p>11. Knowledge of professional convenience ingredients available for use in your kitchen/kitchen classroom. Please indicate if you are using or have used them in your kitchen or college kitchen classroom by ticking, yes, no or not heard of.</p>	<p>I'm going to ask you if you have used several of what I'm using in this research as the base for contemporary convenience ingredients. These are mainly savoury and dessert based. It's a simple question with a yes or no answer. Have you used them, or you're not aware of them?</p> <p>I: So, North African pastes for sauces and marinades? P: Yes. I: You've used them? P: Yep. I: Okay, American pastes? P: Yes. I: Low fat margarine spreads for baking and cooking? P: I would have it, but probably not used as much as we should be. I: So that's aware; why do you say not as much as you should be? P: I suppose we need to reconstruct the menus and recipes to do it. As a pastry chef here it's probably something I should be looking at doing for a healthier type of product for afternoon teas, etc. I: Are you getting more requests for healthy food? P: Yeah, yeah, it's all over the hotel. Certainly on the</p>

	<p>agenda.</p> <p>I: This is a five-star hotel? Five-star food, five-star hotel?</p> <p>P: The effort is certainly there to get it that way. I think it's a global thing, not just in the company. Across all of the UK and Ireland and Europe as well, we're constantly updated and asked for things, new things. It's something that we're not doing enough of but are aware of it.</p> <p>I: Powdered vegetable gelling agent texturisers?</p> <p>P: Yes, used.</p> <p>I: Is that the contemporary part?</p> <p>P: For the new type of dishes we're using for banqueting.</p> <p>I: And you're using other gums?</p> <p>P: Yeah, yeah.</p> <p>I: Are you finding that more common now?</p> <p>P: Yes, you'll get young guys into it a bit more than older guys.</p> <p>I: So this is the contemporary chefs?</p> <p>P: They're the ones that are reading a lot of the books about it. Bits of it certainly work well. Some of it I'm not so keen on.</p> <p>I: Dessert fruit pastes?</p> <p>P: Oh yes. That's a big one,</p> <p>I: Dessert fruit powders?</p> <p>P: Yep.</p> <p>I: Dairy pastes?</p> <p>P: No, not really.</p> <p>I: Interesting one, that's a caramel type base made from use of creams. Alcohol pastes?</p> <p>P: What do you mean?</p> <p>I: More pastes than actual essence.</p> <p>P: I don't think we've used that here, no.</p>
<p>12. What statement do you believe best represents the type of convenience at Q11?</p>	<p>P: E, the modern professional convenience ingredients.</p> <p>I: E, modern professional convenience ingredients. Any particular reason why?</p> <p>P: Because it is reflecting the products which are in the market which have been brought forward in the last decade or so. It's now becoming a common part of a food order request from some of my staff, so I think it's a modern convenience ingredient which is put into some of the recipes for professional chef.</p>
<p>13. Measuring ingredient preference:</p>	<p>I: This is on convenience orientation. The question is designed to gauge your preference to the type of both fresh and convenience ingredients used in your kitchen. So it's just a general question. There's a prefix</p>

	<p>to each of the questions, it starts with “I prefer using ingredients that” I’ll give you several, I’m wondering if you agree or disagree.</p> <p>I: Using ingredients that are easy to prepare and cook quickly?</p> <p>P: It’s all about quality.</p> <p>I: So it might take a little bit longer, but the quality comes first?</p> <p>P: As long as the quality is there.</p> <p>I: I prefer using ingredients that are fresh and unprepared?</p> <p>P: Yes, I would be more inclined to do it that way.</p> <p>I: I prefer using ingredients that reduce food costs?</p> <p>P: Well, in this day and age, it’s got to help. Any chef has to get to grips with that.</p> <p>I: I prefer using ingredients that are major brands and Of consistent quality?</p> <p>P: Definitely.</p> <p>I: I prefer using ingredients that are low in salt?</p> <p>P: Yes, I think it has to come into it nowadays.</p> <p>I: There was a slight reluctance there.</p> <p>P: I think if you do a survey, you would find people honest enough to say they know how much salt content is in that? I don’t think they take enough time to think about it overall, but it reflects on the final product.</p> <p>I: It’s an interesting question, do you think then, there is sufficient knowledge amongst chefs of both generations on nutrition in general in food? Do you think it’s important?</p> <p>P: I think it’s very important. I don’t think enough time is taken over it. It’s something that maybe could be developed further.</p> <p>I: Okay. I prefer using ingredients that are gluten free?</p> <p>P: I think it’s got to be an option these days, because more and more regarding people’s dietary requirements are hitting every operation restaurant, hospitals, hotels, banqueting, the requirements are ten-fold.</p> <p>I: Are you getting that all the time?</p> <p>P: Oh, yeah. It’s good; there’s a course coming on for gluten free run by the Federation, about gluten free. I’ve sent my staff on it.</p> <p>I: Is this part of the Academy?</p> <p>P: No, no. It’s part of on-going master classes to make chefs aware, and this gluten free is a big thing.</p>
14. Measuring acceptable levels of	I: Convenience ingredient usage is acceptable for:

<p>usage of convenience acceptability:</p>	<p>I: High volume banquet catering? P: Yes. I: You mentioned that earlier, is that one of the top ones? P: Yeah, there has to be a mixture, there has to be a balance in there. It's acceptable because it enhances the volume side of it, but it can also be a finisher. It can help finish, enhance the glossiness, the flavour etc. as long as the guys know what they're doing. I: In times of chef skill shortages? P: Most definitely. I: Where food safety is an issue? P: Yeah, I would say that would help it cut out the risk. I: Enhancing the flavour of freshly prepared recipes? P: It does help it. I: It's acceptable. P: It's acceptable, but it's not every day. I: It's for things like high volume catering or maybe skill shortages? P: Yep.</p>
<p>15: Measuring the attitudes and barriers to professional convenience ingredients</p>	<p>I: This restaurant chef culture within in against the use of professional ingredient usage? P: It's a strong word "against". There is a tolerance to use when necessary. You're talking restaurant food here, yeah? So you're talking more a la carte type. I: The entire hotel? P: Generally. I see it, banqueting-wise a different attitude. For restaurant-wise, there's a tolerance to it when necessary. I: Bullions, soups? P: That is fine; I don't think you'd go many places these days without seeing something on somebody's shelf. I: Soup usage would be the most common? P: Most definitely. I: Would you say the hotel restaurant management culture within your group is against the use of professional convenience ingredients? The original question was the chef culture, but the same question for the management culture. P: I wouldn't say they're against it. Again, it goes back to there being an acceptable level of it. I, as a manager, prefer to make fresh stocks and sauces for the restaurant, it's not really enhanced that way, but there are other things that they'll maybe use for different finishes and sauces etc. It's certainly not utilised the way it is for banqueting. I: Convenience ingredient awareness is good for</p>

	<p>general culinary knowledge?</p> <p>P: Doesn't harm. Again, it's going back to the understanding.</p> <p>I: A slightly controversial couple of questions here; convenience ingredients usage encourages the de-skilling of professional chefs?</p> <p>P: It could lead to that, but it shouldn't. Not necessarily.</p> <p>I: If I gave you the counter-question; convenience ingredient usage supports the reskilling and professional development of chefs?</p> <p>P: As I said before, if they have an understanding of it, then it shouldn't do any harm.</p>
<p>16. Knowledge of Modern professional Ingredients in culinary education</p>	<p>I: Do you believe you have limited or good knowledge?</p> <p>P: Yeah, I have an understanding. I could probably do with spending a bit more time reading up about it.</p> <p>I: You're aware of what's there?</p> <p>P: I wouldn't be a professor on it, put it that way.</p> <p>I: Convenience ingredient awareness should form part of catering college cookery curriculums and courses?</p> <p>P: I think it wouldn't do any harm. I'm not trying to Bottle it, but again it goes back to the bit about education, as I said, I think we should be made aware of it, yeah.</p> <p>I: Have you got any current awareness of what they're doing in colleges at the moment in terms of chef development?</p> <p>P: I feel that different colleges are trying different things to be trendier in the market place. The young students are coming out to work in different hotels, restaurants etc. but their knowledge and understanding could be sharper than it is.</p>
<p>17. Industry Convenience ingredient suppliers and manufacturers should undertake more training and development of their products.</p>	<p>Participant agreed with a-e</p>
<p>18. Definition of professional Convenience Ingredients</p>	<p>I: This question is designed to measure your understanding of the definition of professional convenience ingredients. I've got definitions below, and like one of the previous questions, I would ask you if you could read them, pick one which you believe refers best to what you believe the definition of convenience ingredients is.</p> <p>P: The answers are very good. Very well thought out. There are bits in all of them that make you think. I think probably I'd go with this one.</p>

	<p>I: That's the last one. You've ticked off G, that definition suggests those ingredients that meet the culinary needs and convenience of the professional chef at the right time and for the right occasion without compromising consistency and high quality standards. Any further comments you might like to make on that?</p> <p>P: I'm trying to reflect it on the volume of stuff I do here. Predominantly aimed at the banqueting side. It has to look at labour intensive costs but not compromising the final product on the plate. Whether that's for making a stock, sauce or making a soup, etc.</p> <p>I: If the ultimate, holy grail is fresh is best, then cluster of ingredients could achieve without compromise, it gets close to what you'd be looking for.</p> <p>P: If it supports the final product, because ultimately, the proof of the pudding is when people taste and eat. That to me is the important thing. It also reflects on Your statements within the operation; your budgets, your labour costs.</p>
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Appendix 8

Hotel Chef 'Other' comments'

Question 3 Job title

Head Chef x 11
Senior Lecturer - F&B Management x1
Consultant x 2
Partner/pastry chef
Executive chef / Patron
Chef Manager
Executive Chef responsible for Food & Beverage.
Chef owner x 13
Sous Chef x 3
Cook
Commis chef x 4
Ex Executive chef, now Director of hotel Operations
Self-employed chef trainer and hygiene teacher
Director
Chef lecturer x 2
Head of Hospitality and Catering curriculum
Director of Food and Beverage
Royal Pastry Chef
Group Food development Chef
Senior Chef de Partie
Chef de partie x 2
Head of NPD and Innovation
resort kitchen manager
Pastry Chef x 2
Director Culinary

Question 4 Professional chef qualifications

BA Hons x 2
Hotel Admin. and Food Technology - India
Hospitality Degree level 4
HND Professional cookery x 2
Italian Diploma in food and beverage
Btec diploma hospitality & catering management x 2
Diploma in hotel management x 2
HNC professional cookery x 3
Apprenticeship in Austria
Post Graduate in Kitchen management and culinary arts
French diploma (masters)
SVQ Professional cookery
BSc, Graduate city and guilds level six, MA in process
French Catering School
Advanced Craft Guild of Chefs Diploma
Fellow Academy Culinary Arts
Cert Ed - teaching qualification

Hotel Management
Hotel management and post-graduation
2 year degree
Bachelor of Commerce Degree in Hotel Management
NVQ
International qualifications equal to city and guild
MBA in international hospitality management

Question 5 Additional culinary development

Work experience at various sites
CPD
Competing against other countries in competitions is a massive learning curve as well
Post Diploma in food production, Oberoi School of Management,
Various study placements at Michelin Restaurants
On the job training
Generic personal development. i.e., reading, internet etc
Only the work undertaken in the workplace
Intermediate certificate in food hygiene
Food styling...Restaurant consulting
Scholarship Scottish food
ACF certification
BIIAB training butchery bakery etc
competitions etc
Master class through other people
Business studies

Question 6 Professional membership

None x 5
Academy of Culinary Arts x 30
League of Club Chefs x 3
Indian Cook Association x 1
Institute of Hospitality x 1
Ethnic Chef of the Year x 1
Euro Toque x 1
South African Chefs Association x 1
World Association of Chef Societies x 3
Association Culinaire Francaise x 1
National association of Master Bakers x 1
Epicurean World Master Chefs Society x1
Culinary Guild United Arab Emirates x 1
Chaine de Rotisseurs x 2

Q7 Typologies

Old School

Q8 Convenience ingredients usage

A.D.D. for bread production (active dough developer)

Tamarind concentrate, blachan, egg whites, yolks, chemicals i.e. crispfilm, xanthum, tart cases, puff pastry, flavoured vinegars, gelatine, New technology powders agar, calcium chloride, vanilla syrups, packet scone mixes

Whirl butter, packet scone mix, sponge mix and instant potato

Q9 Categorisation

Lazy ingredients

Poison

Ready to Use Restaurant and food service

Q10 Ingredients orientation

Ingredients chosen on merit to suit dish or dietary requirements. Also MSG isn't umami

Use where necessary only

Q15 Definition

Ingredients that chefs should refrain from use or at best used with parsimony.

Appendix 8a

Chef lecturer 'Other' comments

Question 3

Assistant Dean 'college of food' (also still actively teach)
Chef and Hospitality Lecturer
Chef lecturer but manage the department
Chef Manager
Currently head of department
Curriculum leader
Curriculum Manager x 2
Executive Chef
F and B Lecturer
Food Safety & Nutrition Lecturer
Head of Department
Manager
Pastry Lecturer
Programme Co-Ordinator and Chef lecturer
Programme Manager x 2
Restaurant Chef Instructor
Senior Curriculum Manager
Senior Manager (Head of School)
Team leader

Question 4 Professional chef qualifications

MSc Food Safety and Quality Manager
Bachelor of Science x 2
Degree in Hospitality Management
BSC International Culinary Arts
MIH Certificate and Diploma
HND Hotel Catering Management
Ecol Lenorte Paris
Brevet de Maitrise de Cuisinier (French qual.)
Hotel and Catering Operations
Institute of Hospitality x 2
CAP CHEF RESTAURANT; BP RESTAURATION
CIEH - Advanced food Safety, Edexcel, A1, V1, Paul Heathcotes Diploma
in Culinary Arts
Academy MCA
Diploma in Food Hygiene
Advanced hygiene, managerial courses 'various'
BSc culinary arts
Adv Hygiene CIEH & Health & safety

Question 5 Chef lecturer training schemes undertaken

CIPD Cert in Training and
Development
CertEd x 6
B.Ed.

Cert Ed Wolverhampton
University
Cert Ed Leeds
University
Cert Ed Warwick
University
Teachers Training Hons Newcastle U/T

Question6 Professional chef associations

Academy of Culinary Arts x 6
Academy of Food and Wine Service x 1
Institute of Hospitality x 3
Association Culinaire Francaise x 4
National Association of Master Bakers x1
Association of Pastry Chefs x 1
Scottish Academy Culinary Arts x1

Q7 Typologies

A modest professional chef
Not a chef
Not a chef but teach in and around cooking food and gastronomy

Q8 Convenience ingredients usage

Pre prepared pastry
Vegemite, browning, sweet chilli sauce, puff paste, filo paste