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Meeting the Challenges of Care Home Catering for People Living with Dementia: the Sex 'n' Drugs and Rock 'n' Roll Generation

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Introduction to and Context of the Research

I hope I die before I get old! (Townshend 1965). There is no doubt that many Baby-Boomers will be pleased not to have fulfilled The Who's death wish just yet. This might have been a familiar cry in years gone by but now, with the rapidly increasing life expectancy of the Baby-Boomer generation and their greater demands and expectations, the ageing population of a far more rebellious, active and demanding cohort of men and women have more to look forward to. They have paid their dues and taxes and will in future expect the levels of service they have become accustomed to as they enter the later stages of life, perhaps ending their years in residential care homes or a long term care home for the Elderly and Mentally Impaired (EMI), in other words, those living with the "bastard disease", otherwise known as Dementia or Alzheimer's Disease.

The first waves of the Baby-Boomer generation are already in their mid-sixties to seventies (Kahana and Kahana. 2014, pp 380-384) and it should be recognised that many of the current, and near future, intake of care home residents will be from the Baby-Boomer generation, rather than the stoic generation who had survived the privations of World War II, rationing and sacrifice. It will probably be no surprise to many that the rock legend Robert Plant enters his sixty-ninth year this month and Pete Townshend is already 72.

The expectations of the coming generation are far higher with an ingrained sense of entitlement, with food being a major component in residents' health and happiness (Egan. 2013). This sense of entitlement may well prove to be a major challenge, requiring a significant paradigm shift, to future care home management, staff and caterers (Dinsdale, 2016). The Baby-Boomers have been the trend-setters, living different lives than their parents. Many embraced drugs, sex, rebellion and thought little of attending drug fuelled rock and roll concerts and festivals.

In recent years there have been many reports in the media regarding the often poor standards of food, hydration and service in Long Term Care Homes. Many of these have been supported by reports of nursing complaints (Cooper, 2013, p 6). Many long term care homes are now outsourcing their catering requirements to specialist catering companies. The commercial companies have to make a profit and the not-for-profit or community interest companies (caterers) have to limit their losses and hopefully return a surplus. There are also many companies now promoting their ranges of ready-made, frozen, ready to heat, convenience foods, some of which, whilst fulfilling a gap in the market, can hardly be considered the production of the finest culinary artists. How can the quality of Food and Beverage (F&B) Services be improved, whilst maintaining a healthy Profit and Loss (P&L) account? Under current market and financial pressures there is little room for manoeuvre in costs and every caterer is under constant threat from competitors eager to take away business (Ahmed, et al. 2015, p40). This is the problem which the research hopes to address.

This preliminary research, therefore, addresses an understudied area of care home catering provision with the intention to understand the historical and current state of catering and hospitality services within those care homes. The current research is part of an ongoing study to develop a framework for delivering improved nutrition for long term care home residents through resident centred care provided by the catering production and hospitality service delivery staff.

The dietetic and nutritional concerns for the elderly and frail residents of long term care homes have been well-documented and studied for many years, and in significant depth. For example see Cole (2012), Murphy, Holmes and Brookes (2017), Wham, Teh & Moyes, (2015) and Wham, et al (2017) to name but a few out of hundreds. The various journals related to nursing, dietetics, nutrition, geriatric care and clinical care all have their sections on improving nutrition for people living with dementia. The rôles of the catering managers, chefs and hospitality food service staff in the care homes, and the contribution they can make to the well-being of care home residents, much less so.

From that dietetic and nutritional research it is abundantly clear that the needs of the residents have been clearly identified but what is under-developed is **how** to meet those nutritional needs within the working environment of care home catering provision. In particular, what the nutritional research has done, especially the latest outcomes from such as Murphy et al (2017), is to identify the key tensions - **getting the food onto the plate and into the resident**.

The ongoing research will investigate methods by which caterers can improve the services they offer in care homes whilst improving and maintaining their competitive edge; their unique service propositions and profitability and to find out what steps are being taken in terms of creativity and innovation. New systems thinking will be explored to suggest the best or exemplary catering management systems in use.

Added to the above, a new report in The Lancet (Kingston, 2017. p.5) suggests that the care home catering services will face increased challenges, stating "*The past 20 years have seen continued gains in life expectancy, but not all of these years have been healthy years. Our study suggests that older people today are spending more of their remaining life with care needs*". Although not directly mentioned in the report the suggestion that demand for care home places will nearly double within the next 20 years will present further challenges for care home owners, managers and their caterers. Approximately 190,000 more people aged 65 years or older will require care by 2035 to cope with the rise in demand. That equates to an increase of some 86%.

Taking an estimated average residential care home capacity of 55¹ residents that increase could lead to a further capacity demand of some 3,450 care homes by 2035. With each of

¹ Calculated from a database of 68 care homes throughout the UK.

those new homes employing an average of 1 x head chef or cook, 2 x kitchen assistants or cooks and 3 or 4 hospitality / food service staff² that adds up to a significant need for skilled production and service staff in the care home sector. Where will those staff come from? This is a particularly thorny issue, with Brexit on the horizon and care home owners and caterers already struggling to find educated and trained staff. Catering for people living in long term care homes, whether living with dementia or not, presents significant challenges for the care home catering and hospitality staff, whether in-house or working for an out-sourced contractor. There are also reports that as many as one in six long term care homes are facing financial failure as "*the mixture of rising costs, cuts in funding and an aging population has created a volatile situation, with many companies now showing signs of significant financial stress*" (Causer, 2017). The situation is further compounded by continued pressure to improve services having failed to get the basics right.

The literature review has confirmed the stated aims and objectives of the research and has suggested a number of further research questions to be considered in the work.

- Would the philosophy of Resident Directed Foodservice (RDF), using a systems approach, assist Caterers deliver a more hospitable, yet cost effective product?
- What would be the implications for caterers in providing RDF in Long Term Care Homes?

² Based on an average number of staff employed in the care homes surveyed.

Literature Review

Dementia

Dementia is a catch all term for several degenerative brain conditions including Alzheimer's Disease. The root of dementia is from the Latin: 'de' which means without and 'ment' which means mind, historically described as being 'out of one's mind'. The word dementia describes a set of symptoms that may include memory loss and difficulties with thinking, problem-solving or language (Alzheimer's Society, 2014). The most common form of dementia is Alzheimer's disease with vascular dementia and Lewy-body dementia frequently seen – all forms are progressive in nature and lead to functional losses (Amella, Grant and Mulloy 2007, pp 360-361). In recent years as our understanding of the experience of dementia has advanced, so too has our understanding of how to improve the quality of life and well-being of people with dementia in care homes.

McFadden and McFadden (2011, p 12) refer to the unprecedented numbers of the ageing 'baby-boomer' generation who are getting the dreaded dementia diagnosis. Their viewpoint, however, has not been negative and they suggest that the fear and anxiety should be replaced with courage to lead a more fulfilling life. There are, however, many people living with dementia who must seek out the care and support provided by specialist care homes. The Alzheimer's Society UK Dementia Report Statistics (2014) state there are already 850,000 people living with dementia in the UK and suggest that within the next decade, by 2025, there will be one million people living with dementia in the UK.

According to the Alzheimer's Society (2014) latest report eighty per cent of care home residents have dementia. And one in three care home residents are admitted already suffering from malnutrition (BAPEN, 2012, 6). Lui, et al (2014) in a systematic review noted that 'the quality of current research of the effect of mealtime interventions in dementia was poor'. Whereas O'Neil-Perrozi and Perrone (2016) conclude the interventions had a 'moderate' success rate.

Dementia is proving to be one of the fastest growing illnesses and estimated to cost the UK £26.3 Billion per year, £17.4 Billion of that is paid for directly by people living with dementia and their families and a further £8.8 Billion directly paid for by the Exchequer, with £0.1 Billion taken up by other costs. Despite those costs only £74 Million had been spent on dementia research in 2013 – but nothing could be found on expenditure on research into foodservice provision in long term care homes. (The Alzheimer's Society UK Dementia Report Statistics 2014). It is hypothesised that if catering businesses can improve the nourishment of people living with dementia in care homes there will be direct savings for the Exchequer, the care home owners and increased profitability, through better reputation, for the catering service providers.

Taste and texture perception is reduced with older age, and some research indicates that environmental factors also influence the amount of food which dementia patients are able

to eat (Dunne et al., 2004, pp 533-538). This research, however, does not suggest any changes to food and hydration delivery other than changing plate and cup colours. An holistic approach using expert knowledge from hospitality, nourishment (gastronomy), and sensory science disciplines will allow the development of the catering professional leadership, competence and forward-thinking which is fulfilling its social and ethical agenda.

There has also been some discussion on whether or not to legislate or regulate for the standards of food provision in long term care homes for the elderly and people living with dementia. Sheppard (2010, p 29) questioned whether or not the Care Quality Commission (CQC) Review: Meeting the healthcare needs of people living in care homes ²⁰⁰⁹/₂₀₁₀ (CQC 2012, pp 5-7) would call for the introduction of legislation, regulation or stronger guidance – or a combination of all three. This did not happen.

Shortly after that review was completed the Department of Health rearranged the responsibilities of the CQC and a further review, regarding thematic inspections on dignity and nutrition, was commissioned for 2012. Although the reports fell short of suggesting the introduction of legislation or regulation the CQC report, Time to listen: In care homes – Dignity and nutrition inspection programme 2012 – National overview, found several common failings in the care homes inspected.

Several of these concerns were related to the feeding of residents:

- Staff and managers in some homes: did not always give people a choice of food or support them to make a choice; failed to identify or provide the support that people who were at risk of malnutrition needed; did not ensure that there were enough staff available to support people who needed help to eat and drink:
- 14% of homes failed to have enough staff to meet people's needs.
- Homes caring for people with dementia, including those with a dedicated dementia unit, were less likely to be meeting the standards relating to respect and safeguarding.

What, then, is to be made of this? Are catering services, hospitality management and the culinary arts – cooking, serving and feeding – too commonplace or quotidian to be studied seriously or to be able to contribute to the well-being of people living with dementia?

Long Term Care Homes - Catering Definition

Catering services within long term care homes is a large consumer-facing service business where the primary function is the provision of F&B services to residents and staff. That simplistic definition, however, does not fully convey the true outputs. Care home caterers are also responsible for ensuring adequate nourishment is available through the food they produce and serve, not just basic energy. The provision of nourishment, compatible with the primary requirement of human life, is about more than mere food and drink (Caldecott 2014).

To imply that the consumption of food and drink is a vital part of the chemical process of life is to state the obvious but we sometimes fail to realise that food is much more than vital. The only other activity we engage in that is of comparable importance to our lives and the life of our species is sex. Appetite for food and sex is natural, but these two activities are quite different.

Catering, in general, is a fundamental subset of many sectors of society, including the fields of hospitality, healthcare, schools, prisons and so on. Long term care home resident feeding, as with employee workplace feeding, is perhaps one of the largest single elements of the catering sector, but its importance is generally overlooked, both inside and outside the hospitality industry (Edwards. 1993, 10-14). What then is long term care home catering? The historical categorisation suggests: cost sector – as opposed to profit sector; non-commercial – as opposed to commercial. The common theme, however, throughout those descriptions is the inference that care home catering, for many years, has been ignored as a commercial undertaking. The last few decades have seen changes, however, with commercial contract caterers coming to the fore (Earls 2011, p 36, The NACC 2016).

A significant anomaly within the sector, as in other branches of catering, is that to be a care home caterer there is no requirement to hold formal qualifications, not even care credentials (Mamzoori-Stamford 2015). Too many catering jobs in care homes are preoccupied with table clearing, plate scraping and pot washing, and, very often little or no understanding of the food being prepared and served and even less about the residents' needs (Murray 2015).

Fortunately, there are many people employed in long term care home catering services who are excellent at their jobs, evidence a real understanding of nutritional needs and how to prepare nutritious and appetising food, there is however, significant anecdotal evidence that these enlightened souls are in the minority. Both the National Care Forum (NCF, 2007) and the National Association of Care Catering (NACC 2016) offer support, advice and training for care home caterers.

Dementia and Hospitality Business

'Food is your medicine – hence let your medicine be your food' (Hippocrates, circa 400 BC). Many academic commentators have attempted to define hospitality and the term has been described as both commercial and social activities (Brotherton 1999, pp 165-173; Brotherton & Wood 2000, pp 134-154). Within a care home environment there are competing values and priorities. Managers are urged to change perpetually, yet maintain order; to make the numbers, yet nurture their staff; to think globally, yet act locally (Gosling and Mintzberg 2003). Care home nursing managers may be more concerned about the medical status of their charges, rather than the state of hospitality or their immediate comfort, whereas the catering staff may well place more emphasis on the feeding and hydration routines and creature comforts of their 'guests'. Surely though we should not confuse hospitality with hospitableness (Brotherton, 1999 pp 165-173).

Dementia and Hospitableness

There is a small, but growing, body of research questioning the philosophy of, and critical studies of, hospitality and the limited interactions between the different academic traditions, with even less interaction between practitioners and academics. In one overlapping area of the hospitality disciplines, care home catering, sometimes referred to as institutional catering, there appears to be even less interaction between the caterers and nursing or medical staff, as explored in the following sections. In this case we could consider the phenomenon of 'hospitality as care'; 'hospitality as medicine'; 'hospitality as ethics' and; 'hospitality as culture'.

It could be suggested that 'Catering', in the context of the 'principles of hospitality' demands a sacred obligation not just to accommodate the guest, but to protect the stranger, especially the patient living with dementia who arrived at the door of the care-home. It's not that the new resident stops being a customer the moment they enter the care home. Their friends and relatives also do not give up their identities when they cross the care home threshold. Nor should we lose sight of the fact that most, if not all, newly arrived residents did not really want to move in, nor ask for the diagnosis of dementia, so the care provided by the care homes is *enforced* healthcare, a form of *involuntary* hospitality (Soloman, 2014).

The constantly evolving understanding of hospitality, including reference to cultural and religious meaning within our history have been followed, and commented on, by historians of hospitality. Within those studies the definitions of hospitality are wide ranging, including comment on the provision of food and drink, the ethics of welcoming strangers and the etiquette expected of societies (Browner 2003; Pohl 1999).

Should then, a patient resident within a long term care home be considered as a guest and in receipt of hospitality? Should that hospitality be viewed as Derrida (2000, pp 3-18) identified hospitality? In truth, Derrida's explanation of hospitality was far removed from the commercial realities of the hospitality business sector. Nonetheless, hospitableness needs both a host and a guest as there must be an exchange of giving and receiving between the two. Within a long term care home the exchange of giving and receiving is that of money, or other consideration such as insurance premiums, in return for accommodation, medication, nursing care, food, hydration and cleanliness. Who then is the host in the context of long term care home hospitality? Should the host be the Care Home Manager (Registered Manager); the Nutritionist; the Hotel Services Manager, Catering or Hospitality Manager? For clarity then, the definition of commercial hospitality used throughout the rest of this paper is that of the functional form of hospitality rather than the emotional form of hospitality. That is to say, hospitality services are given in exchange for a consideration. Furthermore, it should be recognised that healthcare could be considered as hospitality with healing. Or, if you prefer, it's healing with hospitality (Soloman, 2014).

Catering within LTCHs – Systems, Nutrition, Methods and Gastronomy

It must be accepted, however, that a long term care home is not an hotel, where the daily rates fluctuate according to demand. You cannot just log on to Trip-Advisor or Booking.com to change bookings if you and your family don't like the services offered or the prices charged. Once in a care home the resident is more or less a hostage to the status quo. The Care Quality Commission do publish a ratings guide, varying from outstanding to inadequate, but do not publish, or advise, on costs and rates. From April 2016, all care homes have been expected to display the results of CQC inspection ratings in a prominent position on their premises, much like the 'Scores on the Doors' systems for restaurant food safety.

Just one of the major problems facing those people living with dementia in long term care homes is the reduced intake of nourishment, leading to malnutrition, regardless of the hospitality services. The potentially harmful effects include dysphagia³, apparent food refusal, stress and panic expressed by the resident when fed (DiMaria-Ghalili, 2014, pp 420-427, Amella, Grant and Mulloy, 2008, p 360-367). None of the current research includes mention of the catering support and service staff, chefs, supervisors or catering managers as being part of the multi-disciplinary care teams; people who are usually in close contact with the residents.

There are, however, recent initiatives in the United States of America to integrate healthcare and hospitality services, The Beryl Institute (2016) has reported on an initiative, between the Christiana Care Health System and the University of Delaware Hospitality Associates for Research and Training, bringing together expertise in health care and expertise in the hospitality industry to create a unique training program that will give staff the skills and tools needed to achieve excellence in delivering an exemplary patient experience. Although this initiative was for a large hospital complex the results may well be replicable within long term care homes.

Despite past and current government strategies to improve the nutritional intake for people living with dementia in long term care homes, surprisingly little research has been carried out into the operational, practical and staffing aspects of feeding those people. From a caterer's point of view there has been much advice as to what to feed to the people within their domain: See, for example the myriad information from the Voluntary Organisations Involved in Caring in the Elderly Sector [VOICES] (1998), The Caroline Walker Trust (1995, 2009), Biernaki and Barrett (2001, pp 1104-1114) and Crawley and Hocking (2011), to name but a few. There has, in fact, been a long history of dietary and nutritional advice most of which seems to be both accurate and well intentioned.

³ difficulty or discomfort in swallowing, as a symptom of disease

The complexity of resident feeding, and the management of the process, continues to challenge medical, nutritional, dietitian and operational staff in equal measure (Miller and Kinsel 1998, pp 177-181, Mathey et al 2001, pp 416-423, Remsburg et al 2001, pp 1460-1463, Wilson, Evans and Frost 2000, pp 271-275). Kitwood (1997), together with Miller and Kinsel (1998, pp 177-181), were early promoters of Patient-Focused Care. Kitwood (1997) challenged what was considered to be the standard paradigm within residential care, emphasising the need for a change within the culture of service providers if significant, long-term, improvements were to be made. There are, however, aspects of his work which raise questions as to the viability of Patient Focussed Care, not least of which are the potential increase in costs of providing that care. Nonetheless, with improved technology and innovative advances in catering services, since Miller and Kinsel's (1998) paper, there is hope that improvements can be made.

Miller and Kinsel also recognised the need for change but did not include the food production and service staff in their suggestions for changes though the American model for long term care uses differing terminology. Remsburg et al (2001, pp 1460-1463) referred to several studies which had identified reversible factors associated with malnutrition in nursing home residents in the USA. Those factors included lack of sensitivity to residents' needs and food preferences, poor food quality and poor food choice. Consequently, the suggestion is made that for too long the traditional dining strategies within many long term care home settings have been responsible for under nourishment and that those strategies are in need of re-evaluation.

Considering that such reversible factors have been identified there is a paucity of research into the role of the caterers or catering systems employed within a long term care home setting, particularly within the UK. Nonetheless, diagnostic and treatment options are continuously evolving and new nutritional imperatives for people living with dementia are being discussed as never before, together with other non-pharmaceutical interventions (for example, see: Bakker 2003, pp 46-51; Baptiste, Egan and Dubouloz-Wilner 2014, pp 38-44; Biernaki and Barratt 2001, pp 1104-1108; Brush and Calkins 2008, pp 24-25; Chang and Roberts 2011, pp 36-46; De Bruin et al 2010, pp 352-357; Mathey et al 2001, pp 416-423; Murphy, Holmes and Brookes (2017), Remsburg et al 2001, pp 1460- 1463; Wham, Teh & Moyes, (2015); Wham, et al (2017) and Wilson, Evans and Frost 2000, pp 271-275).

Stemming from the above it is clear that the dominant area of research in terms of increasing or bettering the nourishment intake for people living with dementia is focussed on nutritional aspects – the ***'what should be fed to the patient residents'*** rather than the ***'how it should be fed to the patient residents'***. Within the world of hospitality however, a more prosaic preoccupation with getting things done suggests Brillat-Savarin's 'Physiologie du gout' (1825) has long been considered by professional caterers as still the only science that deals with everything pertaining to the nourishment of man.

As human beings do we have a right to the foods we have enjoyed throughout our lives as we enter the later stages of life or even succumb to the ravages of dementia? Access to foods enjoyed throughout life in a pleasant environment with close friends and family is desired, but often unavailable, to people in long-term care. The mealtime experience in a long term care home can often be associated with dour, institutionalised, canteen like service (Perivolaris, et al 2006, pp 258-267) and far removed from the pleasant atmosphere needed.

Innovation in LTCH Catering, Hospitality and F&B Service

Innovation – defined here as the successful commercialisation of novel, disruptive ideas, (or the Eureka, AHA!! or light- bulb moments) includes new products, services, processes and business models – is a critical component of hospitality & catering business growth. The importance of innovation as a driver of hospitality growth and competitiveness has and will continue to increase in the foreseeable future. Hennessey and Amabile (2010, pp 569-598) state that human progress depends upon the psychological study of creativity, and that strides will not be made until we achieve a far greater understanding of what drives the creative processes. They have identified that research into creativity does not usually cross from one discipline to another, with investigators in one subfield often not even knowing what is going on in another. Perhaps this review will encourage further studies in hospitality and catering innovation for long term care homes.

Since Kitwood (1997) first proposed his theories little movement, if any, has been seen within the UK long term care home market, with a few commendable exceptions. The majority of care homes are still utilising the same F&B production and service techniques which have been in use for decades, despite advanced knowledge of taste flavour profiles (Spence, 2017), and the availability of new food compounds, methods and technologies. Spence further suggests that we should use a new word, '*flave*' to distinguish what products have - *flave*, being the brain image created by tasting. *Flave* would comprise all elements of a food or drink, including the ones that influence our perception, the products taste, aroma, texture, colour, sound, packaging, recollection, even down to the cultural, gender, age and religion elements involved of the tasters. Further studies in this area may well help caterers gain a better understanding of feeding their residents.

Epp (2003, pp 14-18) supports the introduction of Person Centred Care in the care home environment and called for a shift in culture and away from the task oriented model and towards a more holistic model. He defines Person Centred Care as being founded on the ethic of all human beings, regardless of disability, being of absolute value and worthy of respect and suggests that:

1. Person Centred Care is centred on:
 - a. The whole person, not on the diseased brain;
 - b. Remaining abilities, emotions and cognitive abilities – not on losses;
 - c. The person within the context of family, marriage, culture, ethnicity, gender.

2. Care that is centred within a wide society and its values.

Early conversations with catering managers and chefs in care homes suggest they increasingly find themselves assigned the role of ‘the rope’ in a very real ‘tug of war’—pulled in one direction by residents’, or their relatives’, mounting demands, and in the opposite direction by the company’s need for growth and profitability. Residents in care homes and hospitals living with dementia or any other mental disorder are increasingly seen as a management problem and solutions are expected to be found in this context (Donini et al 2007, pp 105-114).

The goal now, then, is to identify methods of preventing the caterers’ rope from snapping by identifying innovative methods of foodservice delivery, calling on the best practices identified in the commercial world of catering services and hospitality. This can be a challenge because of all the other professions involved in caring for patients in care homes. Who are these? How do they interact? What is the role and status of the caterer as a member of the care giving team? Are the caterers viewed as part of the care team, or merely as service providers? Are the caterers sufficiently educated or trained to fully understand the needs of their customers? These are some of the questions which is believed will be answered through the continuing research. The next step in deduction therefore was to ask the essential question: Would the philosophy of RDS of F&B provision assist the F&B Service providers deliver a more hospitable, sustainable, yet cost effective product and service? Investigation of the food chain in its entirety has been used to determine all aspects of nutritional care, including F&B service, by Iff et al (2007, pp 800-805).

This section now takes a broad, exploratory, look at the potential benefits for care home caterers and catering companies in adopting such strategies and critically assesses the application of hospitality systems theory to a medically dominated care home environment.

Such a significant shift in the accepted paradigm of how care home F&B provision is managed and delivered should be of particular interest to the wider catering, hospitality and care home community, due to the totally uncharted waters which the research seeks to navigate. This is particularly relevant given the current debate over standards of care within care home environments. The researchers in this case originally intended to investigate to what extent RDS is in use, if at all, in long term care homes and what the main forms of service delivery are in use, for comparison. Unfortunately the search so far has not revealed any reference to the use of RDS or Patient Directed Foodservice at all. It has already been suggested by some care home operators that as a philosophy for food service delivery, such a proposal may well cause significant upheaval in the care home food service industry, not least due to the perceptions of increased costs. Other impacts are considered and seek to establish benefits for residents’ quality of life. It should be recognised also, that there are likely to be some significant barriers and challenges within the sector.

Kitwood's (1997) theories gained credence in the 1990's with Person Centred Care but it was recognised that the transition to the new way of doing things, new cultures and new challenges would be faced with significant resistance from, not only the residents but also family and staff (McFadden and McFadden. 2011). Since Kitwood (1997) first proposed his theories little movement, if any, has been seen within the UK care home market. The majority of care home caterers, with a few exceptions, are still utilising the same F&B production and service techniques which have been in use for decades.

The emergence of new culinary styles, and the use of what some regard as revolutionary culinary technologies, which ignore the traditional have been coming to the fore in recent years. There has been Cuisine Nouvelle; Asian-Western Fusion; Molecular Cuisine (This 2009), (also referred to as Molecular Gastronomy) and, more recently, Cuisine Note à Note (This. 2012) to name but a few, but how many of those have made it into the lexicon of care home catering? A web search of the most prominent long term care home websites, where menu choices are available, show a decided lack of imagination in the culinary offer. It is also apparent that some care homes will serve those meals at fixed times of the day, ignoring the evidence that people living with dementia do not respond well to fixed dining times, preferring to eat when hungry (Amella, Grant and Mulloy, 2008, pp 360-367; Boczko, 2004, pp 64-67).

Both creativity and innovation, as part of New Product Development (NPD), have played significant rôles in the strategies of many hospitality businesses. Outside the realms of hospitality there is a wide range of products, spanning new-to-the-world, high technology innovations, to what has been described as simple improvements, adaptations and imitations of competitive products. The hospitality industry is no different, being a fast moving environment reliant on ensuring a competitive edge. Yet within that environment little has been published, historically, within the research field of care home catering services on creativity, innovation and NPD.

Moving forward, the preliminary research conclusions are that catering services within the long term care home market have stagnated somewhat and are in need of re-energising in order to meet the demands of the emerging new clientele, the baby boomer generation, whose expectations are significantly different from the Vera Lynne listening generation (Carter. 2014).

Method and Ethics

The Sampling Frame shown in Figure 1 describes the type of care home units studied. Figure 2, overleaf describes the individual units of analysis, the actors involved in delivering F&B services. The sample of care homes used was randomly generated based on the National Institute for Health Research ENRICH⁴ programme Data Base of care homes actively willing to take part in research.

Figure 1: Sampling Frame



The Systems chosen

A: Cook - Hold - Serve

B: Cook - Chill / Freeze - Regenerate / Rethermalise - Serve

C: Buy Ready Meals - Regenerate / Rethermalise - Serve (also referred to as "Assembly - Serve")

Although other catering / food production and service systems exist, including "Cook Serve" (the most common in traditional restaurants) the three above are most representative of the systems currently in use in care home catering environments. If others are identified during the interviews they will be recorded.

⁴ <http://enrich.nihr.ac.uk/participants>

Figure 2: Interview / Questionnaire Scheduling / Observation Type

Senior / Regional Management		Dieticians and Nutritionists		Corporate Chefs / Unit Head Chefs		Catering / Care Assistants Customer Facing
<i>Head Office / Regional</i>	<i>Local Home</i>	<i>Head Office / Regional</i>	<i>Local Home</i>	<i>Head Office / Regional</i>	<i>Local Home</i>	<i>Local Home</i>
Face to Face interviews using semi-structured interview questions with responses recorded and transcribed 1 + hours		Face to Face interviews (Possibly via SKYPE) using semi-structured questionnaire questions with responses written in questionnaire form 1 + hours		Face to Face interviews, during observation period, using semi-structured questionnaire questions with responses recorded and transcribed. Observation notes made at time of visit 4 + hours		Observation of work patterns during service of meals 1 to 2 hours followed by structured questionnaires administered by paper, Tablet or internet 20 minutes
<i>Complex questions of both qualitative and quantitative type</i>		<i>Predominantly qualitative type interview questions</i>		<i>Relatively complex questions of both qualitative and quantitative type</i>		<i>Simplified questions using a mix of types</i>

This is used to create a map of what is happening NOW in the care homes; to describe the reality of what is going on and identify areas of concern and exemplar units (if any).

Each participant type has separate interview questions / questionnaires as briefly outlined above. Face to Face interviews, although time consuming, have generated more in-depth, data rich, responses. Each participant will be, or has been, shown a participant information sheet and signed a participant consent form. The on-line survey form also contains that information.

Data gathering has so far been conducted in the Pilot Study care home in the south of England; two care homes in Lincolnshire, two in South Yorkshire and one in Nottinghamshire. The data gathering will continue over the coming months within several care homes in the South Yorkshire, Derbyshire and Nottinghamshire areas.

The transcription of the recorded interviews has proven to be time consuming, even with the use of transcription software and hardware. Transcription so far has taken approximately seven hours of transcription for one hour of interview.

As the research did not include any direct interaction or contact with, or observation of, the residents living with dementia no specific ethical clearance was required. However, some recent research has questioned the need to obtain ethical clearance for research involving people living with dementia. The current view is that people living with dementia should be excluded from research because of perceived difficulties in consent, capacity and communication (Brooks, Savitch and Gridley, 2017), and they suggest that:

"there is a need for (a) new tools for measuring quality of life of people with dementia which do not require participants to respond in prescribed ways, and (b) ethics and consent processes which are appropriate for non-medical research and which facilitate the involvement of people with dementia."

Initial Findings/Results

The questions used in the interviews and questionnaires have been based on the prior literature review and include topics on the following. Some of the preliminary results and observations are shown for each topic with a brief discussion, *in italics*, where regarded as being appropriate:

Size and capacity of the homes;

The homes surveyed so far have capacities of 23, 32, 39, 60 and 82 residents. Regardless of size or capacity of the home each utilised different dining room clusters for the service and consumption of food for the residents. The dining rooms would not normally seat more than 12 residents, though the larger homes did seat more at one time.

Care had been taken in all of the homes to make the dining facilities as comfortable as possible, though one of the older homes was looking decidedly tired and run-down.

Staffing structures of the group / homes and number of catering staff employed;

Regardless of the size or capacity of the home, each home surveyed employed a minimum of one head chef / cook. None of the homes, even the larger units, employed more than 2 additional kitchen staff. In most of the homes, food service to residents was carried out by Care Assistants; only one home employed dedicated hospitality / food service staff. These were directly responsible for plating the residents' food whilst the nursing and care assistants served the food to the residents.

Productivity data and staff costs will be included in future surveys. None of the care home catering staff appeared to be under particularly severe pressure, especially in the smaller homes. Observations of practices revealed that all of the cooks knew what they were doing from a culinary perspective, having repeated their culinary repertoires many times over, acting almost as if by clockwork. No innovative culinary practices, or use of leading edge equipment, were observed.

Number of dieticians and / or nutritionists employed directly and Relationships between nutritionists, nursing / care staff and catering staff;

None of the surveyed homes directly employed dieticians or nutritionists. A large catering services company employed both dieticians and nutritionists at head office level. Two of the medium sized groups did not see the need, but would instead rely on the community services available or seek advice from the Speech And Language Therapist (SALT) teams at the local hospitals as required.

None of the chefs or managers had recently consulted a dietician or nutritionist. None were particularly aware of recent research and guidance in improving nutritional care for people living with dementia in long term care homes.

Considering all the recent publicity regarding nutrition in care homes it was surprising to note that none had recently sought specific nutritional advice, relying instead on their own, albeit limited, knowledge. This might be due to un-changed menus and recipes, which may have been analysed some time ago, with the chefs sticking with what they know and not wanting to rock the culinary boat.

Educational and training background of staff employed, including catering skills and serving residents living with dementia;

All but one of the head chefs / cooks was educated to Level 2 equivalent C&G or NVQ in cookery / culinary arts. One was totally self-taught without any formal qualification. None of the chefs had received any certified training in cooking for people living with dementia, though two chefs had received on-line training on nutrition awareness in cooking for elderly residents.

None of the Care Assistants responsible for serving food to residents had received any additional catering training other than food safety Level 1 or 2 or dementia specific training in food service.

The education and training of food production and service staff is an area which deserves further research.

Perceptions of professional status of chefs and hospitality staff;

All culinary staff reported being held in high regard by their colleagues in clinical and care rôles. Care home managers were supportive of their catering staff and all were considered to be professional.

What catering systems are currently in use in the care home catering environments;

Without exception, all care home chefs were operating a predominantly cook - hold - serve system. Two chefs were using cook - chill - re-thermalise - serve systems for some dishes but this did not extend to production more than one day ahead. None were using a cook - freeze system.

All but two of the care homes were using heated trolleys to deliver the cooked foods to the dining room clusters. In these cases the food was then plated up directly from the trolleys in a rather messy arrangement of balancing plates and gastronorm containers. The largest care home used wheeled hot boxes to transport food to the dining room buffets where hospitality staff would plate the food and the care assistants serve to the residents. In the smaller of the homes, the cook would plate the food in the kitchen and the care assistants would then deliver to the various dining areas, using plate covers in an attempt to keep the food warm.

Of considerable concern was the apparent lack of knowledge regarding plating skills and food presentation. No effort was really made to make the food look attractive once on the plate. In the care home where the food was served from a heated buffet counter the chefs had made obvious efforts to present the food on the gastro trays attractively but the hospitality food service assistants made no further effort to place the food on the plates in an attractive manner. In this home, however, the homemade foods for the dysphagia residents was attractively plated in the kitchen and regenerated in the servery by microwave. There is a definite need for presentation and plating skills training.

What is the availability of food and drink, times and restrictions;

All the homes in the survey operated standard meal times, with only minor differences. All homes made certain foods available throughout the day and sandwiches and other finger foods were generally available 24 hours.

The standard and quality of food available "out of hours" varied considerably.

Determination of residents' food preferences, likes and dislikes; Application of food passports or care plans;

All care home clinical staff carried out assessment exercises on all new arrivals and either created food passports or care plans, including food preference for all residents. These were updated on a regular basis.

Recognition of changing demographics and their future needs;

None of the care home managers or chefs were really aware of the changing demographics of their future residents and had not made plans in this respect.

Menu and recipe development, cycles, tracking and menu content analysis;

All the chefs interviewed were responsible for creating their own menus with little, if any, input from the managers or community nutritionists. Following analysis of the menu cycles

obtained during the visits only one showed any sign of culinary creativity with the rest being content to maintain the old staples. This attitude showed a marked resistance to change, with the status quo holding sway and brings to mind a famous quote on resistance to change:

The snake which cannot cast its skin has to die. As well the minds which are prevented from changing their opinions; they cease to be mind (Nietzsche, 1881).

Content analysis on the menus seen was restricted to the usual texture, colour and taste. No menu analysis software was in use in any of the homes.

Menu choice options for ordering;

Although menus were often printed, most choices were made by asking the residents what they wanted or by showing what was available, with some homes using pictorial menus.

Need for dysphagia foods and fortifications. Bought in or made from scratch;

All chefs reported a need for texture modified meals for some of their residents. All were making their own from scratch rather than buying in the ready-made products available. There were varying degrees of texture modified foods required from fork-mashable to thin purée. Only one chef made any attempt to re-mould the modified food to make it look as close to the pre-modified food as possible.

The full classification of texture modified foods are B = Thin Purée Dysphagia Diet; C = Thick Purée Dysphagia Diet; D = Pre-mashed Dysphagia Diet; E = Fork Mashable Dysphagia Diet.⁵

Of the foods served and observed it was clear, with one notable exception, that little or no thought had been given to presentation in an attempt to preserve the resident's dignity.

Considering the significant steps forward in knowledge and use of hydrocolloid / gelling agents in commercial kitchens it is surprising that better use of such natural products is not being made in care home kitchens. Although not essential, there are many food grade silicon moulds, or silicon mould making kits, available in the market. The one care home chef who had made attempts at attractively plating the puréed food did so by using traditional chefs' skills such as quenelling and piping. We are currently experimenting with the varied use of hydrocolloids such as maltodextrin, agar-agar and xanthan gum to create life-like individual portions of diced meats and vegetables which have the mouth-feel qualities of puréed foods. We will also be developing recipes for 3-D printed foods for the dysphasia food market.

⁵ These descriptors detail the types and textures of foods needed by individuals who have oro-pharyngeal dysphagia (swallowing difficulties) and who are at risk of choking or aspiration (food or liquid going into their airway). The descriptors provide standard terminology to be used by all health professionals and food providers when communicating about an individual's requirements for a texture modified diet. *National Patient Safety Agency, 2011.*

Average food costs per resident per day;

Often regarded as a contentious issue, all chefs and managers were forthcoming in revealing their daily food cost budgets and actuals. It was not a surprise to note that the high quality homes, where the residents were self-funding, rather than those relying on local council funding, had the highest F&B budgets with one even including an allowance for wine with the meals. The recorded F&B costs were, in no particular order, £2.15, £2.50, £2.55, £2.55 & £5.50. Disregarding the higher end, the average daily food cost per resident is **£2.44**.

In 2008, the Joseph Rowntree Foundation commissioned a Fair Market Price Report from Laing and Buisson⁶. At the time the report considered a fair food cost for an average council funded care home to be £3.29 per resident per day. We can now see how hard pressed care homes in the council funded market have become.

Knowledge and use of new / innovative kitchen equipment

There was a distinct lack of knowledge among the chefs of the advances in time and labour saving kitchen equipment. Most were content with using the standard stove tops and oven and only one was using an induction hob, whilst the others did not know what that was. Other items such as vacuum packers, waterbaths and cVac ovens were unheard of.

There is a need for greater awareness among owners, managers and chefs of the benefits of advances in commercial kitchen technology. Care home kitchen designers need to consider installing some of the technologies in use in commercial restaurant kitchens.

Knowledge of and application of natural food additives and hydrocolloids;

As in the section on dysphasia foods, when questioned on the types of additives and methods available all the chefs were confused about such additives and their potential uses.

⁶ <https://www.jrf.org.uk/report/calculating-costs-efficient-care-homes-0>

Conclusions

This preliminary study has identified significant tensions in what the nutritionists have identified as critical needs for people living with dementia and what the caterers are able to provide. The care home owners and caterers are actively running businesses and **must** return a profit in order to provide a return on investment for their shareholders.

We identified that many care home businesses were already going into administration and it does not look too rosy for the immediate future yet the demand is soon to increase significantly.

Many of the questions asked during the interviews will be re-visited with the intention of making the future research more focussed on the business aspects.

We believe there may well be much to learn from hospital catering services and our future research will reflect that.

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