Have Irish parents put cooking on the back burner?

McCloat, A., Mooney, E., & Hollywood, L. E. (2017). Have Irish parents put cooking on the back burner? *British Food Journal*, 119(5). <https://doi.org/10.1108/BFJ-09-2016-0440>

[Link to publication record in Ulster University Research Portal](#)

Published in:
British Food Journal

Publication Status:
Published online: 01/05/2017

DOI:
[10.1108/BFJ-09-2016-0440](https://doi.org/10.1108/BFJ-09-2016-0440)

Document Version
Author Accepted version

General rights

Copyright for the publications made accessible via Ulster University's Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The Research Portal is Ulster University's institutional repository that provides access to Ulster's research outputs. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact pure-support@ulster.ac.uk.

Emerald

British Food Journal

**Have Irish parents put cooking on the back burner?
An Island of Ireland study of the food skills, cooking
confidence and practices of parents.**

Journal:	<i>British Food Journal</i>
Manuscript ID	BFJ-09-2016-0440.R1
Manuscript Type:	Research Paper
Keywords:	Home Economics, Food Skills, Cooking Skills, Family Meals, Cooking Confidence, Healthy Eating

SCHOLARONE™
Manuscripts

28th September 2016

Have Irish parents put cooking on the back burner?

An Island of Ireland study of the food skills, cooking confidence and practices of parents.

Abstract:

Purpose

The purpose of this paper is to examine the self-reported food skills, cooking confidence and practices amongst a sample of parents on the Island of Ireland (IOI).

Methodology:

Parents (n=363) on the IOI completed a questionnaire exploring confidence levels of food skills, cooking techniques executed and the identification of barriers which might impact on meal preparation. Non-probability convenience sampling was utilised.

Findings:

The majority of parents (75 per cent) learned their basic cooking skills from their mother with home economics classes being the second most popular source of learning. There were a number of statistically significant jurisdictional differences. For example, when preparing dinners, Northern Ireland (NI) parents were less likely to enjoy cooking and more likely to use processed foods such as breaded frozen chicken and jars of sauces than Republic of Ireland (ROI) ($\chi^2=56.167$, $df=1$, $p<.001$). Similarly, parents in NI were less likely to involve family members in meal preparation ($\chi^2=17.939$, $df=1$, $p<.001$). Parents in the ROI reported higher confidence levels than NI parents when cooking from basic ingredients; following a simple recipe and preparing new foods. Over half (51 per cent) of parents identified barriers to cooking with fresh ingredients as: time, cost, busy family life and limited facilities.

Research Implications: Findings indicate that parents would benefit from exposure to practical food skills intervention focused on quick, nutritious family meals while simultaneously developing parents' culinary skills and cooking confidence in home cooked meal preparation.

28th September 2016

Originality / Value:

There is a lack of information pertaining to food skills and cooking confidence amongst parents on the IOI.

Key words

Food skills

Cooking skills

Self-efficacy

Family meals

Home Economics

Cooking confidence

Healthy eating

Article Classification: Research paper

Introduction

From a public health perspective healthy eating habits and a positive attitude to food have consistently been identified as being of high importance during the formative years of childhood and adolescence where food behaviour patterns are established. Parents play a crucial role in creating good food practices and influencing their children's diets (Van der Host, Ferrage and Rytz, 2014; Krolner et al., 2011; Pearson et al., 2009). According to Safefood (2016) one in four children on the IOI are classified as either overweight or obese. This is a cause of concern as obesity in childhood is likely to follow on into adulthood. In addition many parents find it difficult to assess their child's weight status. For example Safefood (2016) reported that 54% of parents with an overweight child and 20% of parents with an obese child incorrectly believed their child's weight was "about right for their height". The short term side effects of childhood obesity include breathing problems, bone development and a range of psychological and social disorders such as bullying (Gandy, 2014). The long term side effects include increased risk of coronary heart disease, type two diabetes and certain cancers in adulthood. The eating habits of children on the IOI are also less than desirable. Currently, many children are not meeting the current dietary

28th September 2016

recommendations of five plus servings of fruit and vegetable daily. Children's portion sizes have increased over the last number of years with saturated fat and sugar consumption both over recommended levels. Indeed one fifth of children's dietary energy intake comes from sugar sweetened beverages, chocolate and confectionary (SafeFood, 2016).

Due to the negative health implications of childhood obesity and the evidence of certain less healthy eating habits there is an increased impetus on the adoption of a healthy lifestyle on the island. Consequently, the role of parental cooking skills and their impact on family meals requires further investigation. International research suggests that family meals may have an important role to play in preventing obesity and establishing healthy food practices (Berge et al., 2012; Chan and Sobal, 2011; McIntosh et al., 2009). Woodruff and Kirby (2013) purport that an effective public health strategy to promote healthy food behaviours should involve encouraging frequent healthy family meals. Lichtenstein and Ludwig (2010) state that the school curriculum needs to provide adolescents with the practical skills required to become confident in the selection, handling and preparation of natural food ingredients. They believe that by having home economics on the curriculum young people will have the necessary skills to lead long and healthy lives.

Family meals can have a positive impact on nutrition and dietary intake with reports suggesting that adolescents who have frequent family meals have higher self-efficacy for healthy eating, consume more fruit and vegetables and less soft drinks (Fruh et al., 2011; Neumark-Sztainer et al., 2010). Studies have shown a positive correlation between family meal frequency and healthy child and adolescent body mass index (BMI) (Berge et al., 2012; Anderson and Whitaker, 2010). It is also argued that an ability to cook has an impact on an individual's competency to exercise control over their diet and make informed decisions with regard to food choices (Caraher et al, 1999; Lang & Caraher, 2001). Szabo (2011) urges families and individuals to re-connect and re-engage with food by cooking from scratch and consequently move away from the consumption of convenience foods. Whilst Lichtenstein and Ludwig (2010) are emphatic in the fact that children who are not exposed to cooking and feel uncomfortable in the kitchen will be at a disadvantage for their entire life.

28th September 2016

Convenience is now one of the key influences impacting on food choice selection (Jackson and Viehoff, 2016). Commercially prepared meals and convenience foods are readily available and can be obtained as either ready-to-heat or frozen ready meals at an affordable price for families. Changing meal patterns have led parents to become more disassociated with food and will result in less frequent cooking and hands on meal preparation whilst increasing their consumption of snack and convenience foods (Woodruff and Kirby, 2013). Recent research in Ireland and Great Britain identified that the majority of adults in both the ROI (76%) and Great Britain (78%) choose foods that are easy to prepare and to cook. However, 42% of ROI adults and 49% of Great British adults agreed that convenience meals are a good substitute for home cooked meals when time is limited (Bord Bia, 2013). With ready-made meals so easily available, Simmons and Chapman (2011) query as to why families would bother cooking a meal at home when skills such as meal planning, food preparation, shopping and having access to physical resources are all pre-requisites. Mc Gowan et al, (2015) notes that that the increasing use of such convenience products demonstrate a correlated reduction in the frequency and time spent preparing meals using fresh and basic ingredients in the UK.

According to Soliah, Walter and Jones (2012) a key barrier to cooking meals is lack of food preparation and cooking skills. Recent reviews by McGowan et al, (2015) and the Government of Canada (2010) identified the important relationship between food preparation, cooking skills and healthy food choices of families. They highlighted low self-efficacy and self-confidence in cooking as a barrier to healthy food choices. Beshara, Hutchinson and Wilson (2010) acknowledged food preparation and cooking confidence in mothers as an important predictor of meal healthiness. They found mothers who were less confident in cooking a healthy meal were more likely to prioritise the use of convenience foods and fast food instead of preparing a healthy meal for the family.

Furthermore, whilst some have argued that cooking skills are in decline due to a 'deskilling' of individuals and a reliance on convenience foods (McGowan et al., 2015; Caraher, 2013; Lang & Caraher, 2001; Caraher & Lang, 1999); others refer to it as a 'transition' or a change in cooking and food preparation behaviours and a move away 'from scratch' cooking (Government of Canada, 2010). Dougherty and Silver

28th September 2016

(2007) maintain that cooking ‘from scratch’ skills are being lost among children and adolescents particularly as families utilise prepared meals and convenience foods. By not involving children in food preparation at meal times, Soliah, Walter and Jones (2012) argue that children are less likely to have an opportunity to develop cooking skills at home.

To date little is known on the role parents play in the provision and type of meals in the home setting and their implications on health. In addition, there is limited research on understanding the food preparation and cooking skills of parents particularly on the IOI. The purpose of this paper is to examine the self-reported food skills, cooking confidence and practices amongst a sample of parents on the IOI

Methods

A paper based survey was conducted across the ROI and NI. Surveys were administered by the field researchers and collected from the participants after 10 days. An information letter to parents outlined the nature of the study and a consent form was provided. No incentive was used within this study. Ethics permission for the survey was granted by University Ulster Research Ethics Committee.

Sampling

A pilot was conducted with 10 parents in NI and ROI. Following some amendments to the survey, data collection took place in the spring of 2014. A total of 363 parents on the IOI took part in the survey (218 from the ROI and 145 from NI). Participants were obtained from a convenience sample located near each university campus (Sligo and Coleraine). All participants were parents (n=363) and overall 90 per cent of respondents declared responsibility for either the ‘majority’ or ‘all’ of the cooking in the household, 91 per cent were female and 9 per cent male. All participants had to be over 18 years old to complete the survey.

The Questionnaire

Based on the literature, a survey was developed which included measures on parents perceived cooking skills and cooking behaviours. Participants *feelings towards*

28th September 2016

cooking were measured using items relating to cooking enjoyment (rated on a 5-point scale from strongly agree to strongly disagree) and questions relating to attitudes towards cooking (one closed-ended question with a one-choice answer option including “enjoyable” or “chore” and an open ended option for participant to explain the answer). Measures relating to *family members involvement in cooking* included one closed-ended question with a one-choice answer option including “yes” or “no” and an open ended option for participant to explain the answer. Questions on the type of preparation (one closed-ended question with 5 one-answer options) were included in order to measure cooking styles, frequency of scratch cooking (rated on a 5-point scale from daily to never) and cooking confidence (rated on a 7-point scale from extremely confident to not at all confident). Measures relating to the *learning of cooking skills* included one question where participants gained their basic cooking skills (one closed-ended question with 10 one-answer options). *Cooking skills* measures included items relating to specific cooking behaviours (e.g. I cook a separate meal for my children, I bake fresh bread from scratch etc.) were rated on a 5-point frequency scale from always to never). *Eating habits* measures included participant consumption of fruit, vegetables, pasta/rice, potatoes and fish (rated on an 8-point frequency scale from never to 3 times a day or more). Nutrition knowledge was measured by asking participants to identify how many portions of fruit and vegetables certain product items contain (e.g. one small raspberry yoghurt (rated on 4-point scale from 0 to 3 and “Don’t know”). Measures relating to the *cooking behaviours* (e.g. I cook a separate meal for my children, I bake fresh bread from scratch etc) were rated on a 6-point frequency scale from 1 equalling always to 5 equalling never and 6 equalling don’t know). Demographics (e.g. country of residence, household size gender and socio-economic status) were also obtained.

Data analysis

All data was inputted and analysed using the SPSS (SPSS, 2013, version 21). As sampling took place in two jurisdictions initial analysis using t-tests and chi-square, as appropriate, explored the differences between the ROI and NI. In this paper we focus on the self-reported food skills, cooking confidence and practices of parents in both jurisdictions.

28th September 2016

Limitations

A methodological limitation of the study includes, at the time of distribution of the survey, a lack of prior quantitative research conducted within the area of cooking skills to enable the use of existing validated measures to inform the development of the survey. In addition, further development of some survey questions is required to allow items to be measured on a 5-point Likert scale. The use of self-reported data must also be highlighted as potential bias can occur relating to selective memory and honesty of reporting.

Results

Learning of basic cooking skills

The majority (75 per cent) of parents on the IOI learned their cooking skills from their mother. The second most common source of learning accounting for 43 per cent of parents was at secondary school in either Home Economics classes in the ROI and Food Technology class in NI. The third (30 per cent) most popular source of learning cooking skills was cookery books followed by cookery programmes at 22 per cent. Only 9.7 per cent of parents learned basic cookery skills from cookery websites

Attitudes towards cooking

Results showed that the majority of parents (65 percent) enjoyed cooking meals from scratch. There was, however, a significant difference in parents enjoyment of cooking between jurisdiction where the ROI parents found cooking more enjoyable than NI parents ($\chi^2=17.890$, $df=2$, $p<0.001$).

Results from both jurisdictions found that only 30per cent of parents described cooking as a chore. The qualitative data, obtained from open ended questions, highlighted that for some parents cooking during the week was a chore due to time constraints but for the majority of parents, cooking at the weekends was perceived to be an enjoyable task as time allowed them to be more adventurous in their choice of meal to cook. Comments such as “*the pressure of getting food quickly onto the table*

28th September 2016

after a full day at work” means that weekday dinners can be “repetitive and boring” reinforced this issue.

Cooking confidence

Measuring individual cooking confidence revealed that 25 per cent of ROI and 19 per cent of NI parents felt “*extremely confident*” when cooking and preparing new foods that they had not come across before. Forty six percent of ROI parents felt “*extremely confident*” with cooking from basic ingredients as opposed to 38 per cent of NI parents. Furthermore, 60 per cent of ROI versus 46 per cent of NI parents were “*extremely confident*” in following simple recipe instructions while 38 per cent of ROI and 29 per cent of NI parents were “*extremely confident*” about tasting new foods.

Cooking style

With regard to food preparation methods, there are significant statistical differences between parents in NI and the ROI in relation to the use of convenience products; ready-made meals and assembling ready-made ingredients to complete a meal.

With regard to cooking style, parents in NI were more likely to use convenience foods such as ready meals and to assemble readymade ingredients to complete a meal. As can be seen in the breakdown of results (Figure I), parents in NI scored significantly higher ($\chi^2=56.167$, $df=1$, $p<.001$) in their use of convenience meals with 43 per cent of parents in NI reported utilising convenience foods as opposed to only 9 per cent of parents in the ROI. Also, 61 per cent of parents in NI were found to be significantly higher ($\chi^2=16.767$, $df=1$, $p<.001$) users of pre-prepared and readymade ingredients in the assembly of meals compared to only 42 per cent of parents in the ROI.

Insert Figure I here

28th September 2016

Barriers to cooking from scratch

Half (51 per cent) of ROI parents and 49 per cent NI parents, identified several barriers to cooking from scratch. Time constraints were named by parents as the main barrier to cooking ‘from scratch’. Other qualitative examples cited included shift work and full time employment with the parents explaining that they were “*just too tired*” to think about cooking a meal from scratch. Not prioritising cooking amidst other tasks was identified as a second barrier to cooking from scratch. Parents stated that working full-time, coupled with busy children, meant that families had “*better things to do*”, “*other things to get on with*” than cooking a meal from scratch.

A third barrier reported by parents was a lack of cooking skills, “*I just don’t know how*”, as too did the “*lack of certain ingredients needed*” for some from scratch recipes. Parents revealed they were likely to make dinners from “*whatever ingredients*” were in the house rather than selecting unusual ingredients in other recipes and indeed linked to this was the barrier of cost. Other qualitative comments also revealed that parents believed that cooking from scratch was more complicated than cooking with readymade ingredients or convenience foods. For example some parents thought it a waste of time to make sauces from scratch when it was available pre-made in a jar. Parents also explained that from scratch dishes need more ingredients which can be off putting from a cost perspective as “*the cost of food has risen so that’s off-putting*”.

Cooking practices

There were apparent differences between the jurisdictions in the different types of cooking techniques and applications executed by parents (Table I). For instance chopping and cooking fresh vegetables was more common in the ROI than in NI. Also ROI parents were less likely than NI parents to use prepared frozen vegetables and tinned vegetables. Roasting meat was also more common in the ROI in comparison to parents in NI as was the cooking of breaded frozen fish. Baking as a culinary application was more common amongst ROI parents than NI parents. Similarly, with regard to making bread ROI parents were more likely to bake bread from scratch when compared to parents from NI

28th September 2016

Insert Table I here

Eating Habits

An analysis of parent's consumption patterns relating to fruit, vegetables, pasta and rice, potatoes, fish and fish products was conducted (Table II) across week and day frequencies. Results indicate that ROI parents ate more vegetables and salad, fish & fish products, and baked, boiled, and mashed potatoes compared to NI parents.

Insert Table II here

Involving family members in the cooking

The majority of parents in the ROI (80 per cent) versus fifty nine percent of parents in NI involved family members in the cooking process, this result was statistically significant ($\chi^2=17.939$, $df=1$, $p<.001$). Qualitative comments outlined examples of cooking activities which would be executed by young children and teenagers alongside their parents including: chopping vegetables, stirring saucepans or cutting out scones. Parents involved their young children and teenagers in the cooking process, usually by "*chopping veg*" and "*stirring*" while they "*cook up*". Children seemed to be particularly involved in baking and "*cutting scones*". Parents felt it was important to involve their kids in the cooking process, teaching them a "*basic skill*" so that they can have it going into adulthood "*I think it is important to get the children involved as soon as they are able*". Some also involved their children as they felt their children were interested and able to cook alongside them, "*My daughter often chops veg and makes bread, buns and cakes, also helped me make pizza dough*". The negative qualitative comments included "*children not interested*" and "*time pressure*" for reasons not to permit family member involvement. Results also showed that parents from the ROI (58 per cent) were less likely to make separate meals for their children compared to parents in NI (31 per cent).

28th September 2016

Discussion

To the best of our knowledge, the present study is the first one that examines food skills, cooking confidence and practices amongst parents on the IOI.

The findings suggest that the majority of participants enjoyed cooking meals from scratch with few parents viewing it as a chore. The results from this study provide empirical evidence of the link between cooking enjoyment and the likelihood to cook from scratch using fresh ingredients. Parents from ROI ate significantly less convenience foods and complete meals using readymade ingredients (such as jarred sauces) when compared to NI parents. Parents from NI cooked from scratch ingredients significantly less often than ROI parents. Parents who thought cooking was a chore cooked from scratch less often than those that enjoyed cooking. The reliance of NI counterparts on convenience foods and readymade ingredients indicates a possible paradigm shift in cooking perceptions as meal assembly and reheating prepared foods has become an acceptable cooking practice. Lichtenstein and Ludwig (2010) highlight that due to parental reliance on take away food, frozen meals and prepared package foods, many children seldom get the opportunity to taste a home cooked meal much less be exposed to the ingredients that go into making one. They also believe that having home economics as a mandatory part of the school curriculum would transform meal preparation from a daunting chore into a manageable and fulfilling activity.

This study confirmed that time was the main barrier to cooking from scratch using fresh ingredients. Other results showed cooking confidence, lack of prioritisation, limited cooking skills and knowledge, and cost as barriers to cooking from scratch. A study by Beck (2007) found that most evening meals included processed commercial food (e.g. ready to eat or convenience food) in at least moderate amounts, with the use of these foods saving approximately 12 minutes of hands on cooking time. Similarly, Lavelle et al, (2016) highlighted barriers to scratch cooking including time pressures; saving money; desire for effortless meals; family food preferences and effect of kitchen disasters.

28th September 2016

The results in this study have also shown that cooking confidence has an impact on meal preparation. McGowan et al, (2015) identified low self-confidence in cooking as a barrier to healthy food choices. Lavelle et al (2016) noted that a key facilitator to cooking from scratch was self-efficacy and confidence in one's cooking ability. Furthermore, in a study by Beshara, Hutchinson and Wilson (2010), mothers who were less confident in cooking a healthy meal were more likely to prioritise the use of convenience foods instead of preparing a healthy meal for the family. The results demonstrate that the majority of parents had learned their basic cookery skills from their mother or from established cookery lessons in the school environment, such as Home Economics or Food Technology classes. In contrast new skills were learned independently such as through cookery books and cookery programmes. These findings are consistent with the literature to date and highlight the key role parents, more specifically mothers, play in preparing meals for the family and developing food and cooking skills within the domestic setting (Van der Host, Ferrage and Rytz, 2014). The importance of Home Economics on the national curriculum in both jurisdictions must also be acknowledged. Lichtenstein and Ludwig (2010) state that home economics in schools is crucial to ensuring that both boys and girls have the basic principles of food preparation they need to feed themselves and their families within the current food environment. Indeed, they call it a "version of hunting and gathering" for the 21st century and they believe that home economics education must be part of the long term solution in tackling childhood obesity.

This study reported a number of statistically significant differences across the two jurisdictions (ROI and NI), however, one of the most interesting results highlighted a reticence among NI parents to involve family members in the cooking process and a reliance on processed food while cooking. Another notable difference revealed that ROI counterparts were less likely to cook a separate meal for their children than NI counterparts further suggesting that the role of family involvement in cooking is vital for improving a child's willingness to try or eat the same meal as other family members. These results are similar to those described in Beck (2007). More recently, one study demonstrated that by involving children in cooking activities and meal preparation their willingness to taste novel foods increased (Alloiret et al, 2016). Therefore, the findings from our study may contribute to understanding the need to

28th September 2016

involve family members, specifically children, in the domestic cooking process. These associated cooking practices highlight an opportunity to develop cooking interventions which involve more than one family member as this might have a positive effect on the types of meals prepared and foods used while cooking. A study by Chu et al. (2014) of 10 – 12 year boys found that those children with a higher level of food involvement in the home were associated with a higher fruit and vegetable intake and better diet quality. Therefore, the sharing of cooking responsibility within a household may not only promote social cohesion within the family but have positive implications on dietary quality.

Conclusions

The present study explores the self-reported food skills, cooking confidence and practices amongst a sample of parents on the Island of Ireland (IOI). Though further studies are necessary in other contexts, the results of this study provide evidence to suggest that parents, specifically mothers, play a central role in developing food skills of children. The results also demonstrate that parents would benefit from exposure to targeted interventions to develop their food skills and cooking confidence within the domestic setting. Realistically, practical cookery sessions using quick nutritious family friendly recipes would need to be devised as part of these interventions. The development of such interventions could lead to improvements in parents’ food skills and facilitate more opportunities for parents to model healthy cooking and food related behaviours. Furthermore, the role of home economics in the school setting warrants further exploration as it is the only subject which teaches the actual practical food skills required by adolescents and their families.

Acknowledgements:

See additional pages for figures and tables

28th September 2016

References:

- Allrot, X., da Quinta, N., Chokupermal, K. and Urdaneta, E. (2016). Involving children in cooking activities: A potential strategy for directing food choices towards novel food containing vegetables. *Appetite* 103 (2016) 275-285.
- Anderson S.E. and Whitaker R.C. (2010). Household routines and obesity in US preschool-aged children. *Paediatrics*, 125(3):420-8.
- Beck, M. (2007) Dinner preparation in the modern United States. *British Food Journal*, 109 (7) (2007), pp. 531–547.
- Berge, J.M., MacLehose, R.F., Loth, K., Eisenberg, M., Fulkerson, J. Neumark-Sztainer, D. (2012) Family meals. Associations with weight and eating behaviors among mothers and fathers. *Appetite*, 58(3), pp.1128-1135.
- Beshara M., Hutchinson A., Wilson C. (2010). Preparing meals under time stress. The experience of working mothers. *Appetite*, 55(3): pp.695-700
- Bord Bia (2013) *Periscope 2013: Irish and British diets – consumers and their food*. Available at: <http://www.bordbia.ie/industry/manufacturers/insight/publications/bbreports/PERIscope6/PERIscope2013SummaryReports/Periscope%207%202013%20Summary%20Report-Ireland%20and%20GB.pdf>
- Caraher, M., Dixon, P., Lang, T., and Carr-Hill, R (1999) The state of cooking in England: The relationship of cooking skills to food choice. *British Food Journal*, 101 (8) (1999), pp. 590–609
- Caraher, M., Seeley, A., Wu, M., & Lloyd, S. (2013). When chefs adopt a school? An evaluation of a cooking intervention in English primary schools. *Appetite*, 62.
- Chan, J.C., and Sobal, J., (2011). Family meals and body weight. Analysis of multiple family members in family units, *Appetite*, 57(2), pp.517-524.

28th September 2016

Chu, Y. L., Storey, K. E., & Veugelers, P. J. (2014). Involvement in meal preparation at home is associated with better diet quality among Canadian children. *Journal of Nutrition Education and Behavior*, 46(4).

Dougherty, K. and Silver C (2007). Chef-nutritionist teams spark enjoyment and learning in cooking education series for 8- to 12-year-olds. *Journal Nutrition Education Behaviour*, 39(4):237-8.

Fruh, S., Fulkerson, J., Mulekar, M., Kendrick, L., and Clanton, C. (2011). The Surprising Benefits of the Family Meal. *The Journal of Nurse Practitioners*. Volume 7, Issue 1, January 2011.

Gandy, J. (Ed) (2014). *The manual of dietetic practice* 5th edition. Oxford Wiley Blackwell.

Government of Canada (2010). Improving cooking and food preparation skills: A Synthesis of the Evidence to Inform Program and Policy Development. Available at: http://www.hc-sc.gc.ca/fn-an/alt_formats/pdf/nutrition/child-enfant/cfps-acc-synthes-eng.pdf

Jackson, P. and Viehoff, V., (2016). Reframing convenience food. *Appetite*, 1;98:1-11.
Krølner, R., Rasmussen, M., Brug, J., Klepp, K.I., Wind, M. and Due, P. (2011). Determinants of fruit and vegetable consumption among children and adolescents: a review of the literature. *International Journal of Behavioral Nutrition and Physical Activity*, 8: 112.

Lang, T. and Caraher, M. (2001). 'Is there a culinary skills transition? data and debate from the UK about changes in cooking culture', *Journal of the Home Economics Institute of Australia*, 8 (2), pp.2–14.

Lavelle, F., McGowan L., Spence, M. Caraher, M., Raats, M., Hollywood, L. McDowell, D., McCloat, A. Mooney, E. Dean, M. (2016). Barriers and facilitators to

28th September 2016

cooking from 'scratch' using basic or raw ingredients: A qualitative interview study. *Appetite* Volume 107, 1 December 2016, pp. 383–391.

Lichtenstein, A.H. and Ludwig, D.S. (2010). 'Bring Back Home Economics Education', *Journal of the American Medical Association*, 303(18), pp.1857-1858.

McGowan, L., Caraher, M., Raats, M., Lavelle, F., Hollywood, F., McDowell, et al. (2015). Domestic cooking and food skills: A review. *Critical Reviews in Food Science and Nutrition*.

McGowan, L., Pot, G.K., Stephen, A.M., Spence, M., Raats, M., Lavelle, F., et al., (Under Review) (2016). The influence of socio demographic, psychological and knowledge related variables alongside perceived cooking and food skills abilities in the prediction of diet quality in adults: A nationally representative cross sectional study. *International Journal of Behavioral Nutrition and Physical Activity*.

McIntosh, J.E., Long, C.M. and Wells, Y.D. (2009). Children beyond dispute: A four year follow up study of outcomes from Child focused and Child inclusive post separation family dispute resolution. <https://www.ag.gov.au/Publications/Documents/ArchivedFamilyLawPublications/Report1.pdf>

Neumark-Sztainer, D., Hannan, P., Story, M., Croll, J. (2003). Family meal patterns: Associations with socio demographic characteristics and improved dietary intake among adolescent. *Journal of the American Dietetic Association*. Volume 103 Number 3 March 2003.

Pearson N., Biddle S.J., and Gorley, T. (2009). Family correlates of breakfast consumption among children and adolescents. A systematic review. *Appetite*, 52(1):1-7.

Safefood (2016). Childhood Obesity: The Facts. Available at <http://www.safefood.eu/Childhood-Obesity/Facts.aspx> [Accessed 12th February 2016]

28th September 2016

Simmons, D., and Chapman, G. (2012). The significance of home cooking within families. *British Food Journal*, Vol. 114 Iss 8 pp. 1184 – 1195.

Soliah, L., Walter, J., and Jones, S. (2012). Benefits and Barriers to Healthful Eating: What Are the Consequences of Decreased Food Preparation Ability? *American Journal Lifestyle Medicine*. April 2012.

Szabo, M. (2011). The Challenges of “Re-engaging with Food”. *Food, Culture and Society*. Volume 14 Issue 4 December 2011.

Van der Horst, K., Brunner, T.A., Siegrist, M. (2011) Ready-meal consumption: Associations with weight status and cooking skills. *Public Health Nutrition*, 14 (02) (2011), pp. 239–245

Woodruff, S., & Kirby, A. (2013). The Associations Among Family Meal Frequency, Food Preparation Frequency, Self-efficacy for Cooking, and Food Preparation Techniques in Children and Adolescents. *Journal of Nutrition Education and Behavior*. Volume 45, Number 4, 2013.

Worsley, T., Wang, W. C., Wijeratne, P., Ismail, S., & Ridley, S. (2015). Who cooks from scratch and how do they prepare food? *British Food Journal*, 117(2).

Wrieden, W. L., Anderson, A. S., Longbottom, P. J., Valentine, K., Stead, M., Caraher, M. and Dowler, E. (2007). The impact of a community-based food skills intervention on cooking confidence, food preparation methods and dietary choices an exploratory trial. *Public Health Nutrition*, 10(02).

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

British Food Journal

		Always (%)		Often
		NI	ROI	NI
	Cook fresh vegetables	32	55	34
	Cook main meal with chicken breast	9	15	54
	Roast meat in the oven	12	19	27
	Cook main meal with minced beef	6	8	48
	Cook with fresh fish	2	5	20
	Cook with breaded / frozen fish	17	1	37
	Cook a Stir Fry	2	3	23
	Use jar / packet sauce when preparing a main meal	1	2	29
	whisk eggs to make scrambled eggs	17	28	28
	Make sauce from scratch	34	14	19
	Bake a sponge cake	5	6	15
	Bake fresh bread	1	10	4
	Use prepared frozen vegetables for main meal	1	1	15
	Use tinned vegetables as part of main meal	2	1	2
	Make Homemade soup from fresh ingredients	16	24	25
	Cook Potatoes	15	35	57
	Make your own lunch	31	54	39
	Make children's lunch	44	73	26

1							
2	n (%)	Sometimes (%)		Rarely (%)		Never (%)	
3	ROI	NI	ROI	NI	ROI	NI	ROI
4	36	27	7	6	2	1	0
5	56	29	24	6	5	2	1
6	48	35	26	15	5	12	2
7	49	40	34	4	6	2	3
8	24	30	43	27	21	21	7
9	12	37	43	9	35	1	10
10	36	42	36	23	17	9	8
11	20	41	42	23	25	6	12
12	35	37	32	6	4	13	2
13	18	20	20	14	24	13	24
14	10	20	32	20	24	40	28
15	11	11	24	16	24	67	31
16	8	38	32	28	38	19	20
17	6	42	20	28	30	26	44
18	30	33	23	16	14	10	9
19	58	24	6	4	2	0	1
20	28	20	11	7	5	4	3
21	12	16	6	9	1	5	8
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							

Eating Habits	Never (%)	
	NI	ROI
<i>How often do you eat ...</i>		
fruit	2	1
vegetables & salad (excluding potatoes)	0	1
pasta & rice	2	1
baked, boiled or mashed potatoes	1	1
chips, fried or roast potatoes	2	5
fish or fish products	16	8

1								
2	Less than once week (%)		Once a week (%)		Two - four times a week (%)		five-six ti	
3	NI	ROI	NI	ROI	NI	ROI	NI	
4	3	4	2	4	31	26	23	
5	3	3	1	3	35	14	19	
6	3	9	23	28	63	55	8	
7	6	2	13	4	59	55	18	
8	22	38	39	40	28	14	9	
9	27	14	33	45	23	29	1	
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
54								
55								
56								
57								
58								
59								
60								

mes week (%)	once a day (%)		Twice a day (%)		Three times or more a day (%)	
	ROI	NI	ROI	NI	ROI	NI
14	15	20	15	19	8	12
28	24	55				
5	1	1				
27	3	11				
1	1	1				
2	1	1				

8 December 2016

Have Irish parents put cooking on the back burner?

An Island of Ireland study of the food skills, cooking confidence and practices of parents.

Abstract:

Purpose

The purpose of this paper is to examine the self-reported food skills, cooking confidence and practices amongst a sample of parents on the Island of Ireland (IOI) and to —highlight jurisdictional similarities and differences between Northern Ireland (NI) and the Republic of Ireland (ROI).

Methodology:

Parents (n=363) on the IOI completed a questionnaire exploring confidence levels of food skills, cooking techniques executed and the identification of barriers which might impact on meal preparation. Non-probability convenience sampling was utilised.

Findings:

The majority of parents (75 ~~per cent~~percent) learned their basic cooking skills from their mother with home economics classes being the second most popular source of learning. There were a number of statistically significant jurisdictional differences. For example, when preparing dinners, Northern Ireland (NI) parents were less likely to enjoy cooking and more likely to use processed foods such as breaded frozen chicken and jars of sauces than Republic of Ireland (ROI) ($\chi^2=56.167$, $df=1$, $p<.001$). Similarly, parents in NI were less likely to involve family members in meal preparation ($\chi^2=17.939$, $df=1$, $p<.001$). Parents in the ROI reported higher confidence levels than NI parents when cooking from basic ingredients; following a simple recipe and preparing new foods. Over half (51 ~~per cent~~percent) of parents identified barriers to cooking with fresh ingredients as: time, cost, busy family life and limited facilities.

Research Implications: Findings indicate that parents would benefit from exposure to practical food skills intervention focused on quick, nutritious family meals while simultaneously developing parents' culinary skills and cooking confidence in home cooked meal preparation.

8 December 2016

Originality / Value:

There is a lack of information pertaining to food skills and cooking confidence amongst parents on the IOI.

Key words

Food skills

Cooking skills

Self-efficacy

Family meals

Home Economics

Cooking confidence

Healthy eating

Article Classification: Research paper

Introduction

From a public health perspective healthy eating habits and a positive attitude to food have consistently been identified as being of high importance during the formative years of childhood and adolescence where food behaviour patterns are established. Parents play a crucial role in creating good food practices and influencing their children's diets (Van der Host, Ferrage and Rytz, 2014; Krolner et al., 2011; Pearson et al., 2009). According to Safefood (2016) one in four children on the Island of Ireland (IOI) are classified as either overweight or obese. This is a cause of concern as obesity in childhood is likely to follow on into adulthood. ~~In addition many parents find it difficult to assess their child's weight status. For example Safefood (2016) reported that 54% of parents with an overweight child and 20% of parents with an obese child incorrectly believed their child's weight was "about right for their height".~~

The short term side effects of childhood obesity include breathing problems, bone development and a range of psychological and social disorders such as bullying (Gandy, 2014). The long term side effects include increased risk of coronary heart

8 December 2016

disease, type two diabetes and certain cancers in adulthood. The eating habits of children on the IOI are also less than desirable. Currently, many children are not meeting the current dietary recommendations of five plus servings of fruit and vegetable daily. ~~Children's p~~Portion sizes have increased over the last number of years with saturated fat and sugar consumption both over recommended levels. ~~Indeed~~Indeed, one fifth of children's dietary energy intake comes from sugar sweetened beverages, chocolate and confectionary (Safefood, 2016).

International research suggests that family meals may have an important role to play in preventing obesity and establishing healthy food practices (Berge et al., 2012; Chan and Sobal, 2011; McIntosh et al., 2009). Woodruff and Kirby (2013) purport that an effective public health strategy to promote healthy food behaviours should involve encouraging frequent healthy family meals. Due to the negative health implications of childhood obesity and the evidence of certain less healthy eating habits there is an increased impetus on the adoption of a healthy lifestyle on the island. Consequently, the role of parental cooking skills and their impact on family meals requires further investigation.

Family meals can have a positive impact on nutrition and dietary intake with reports suggesting that adolescents who have frequent family meals have higher self-efficacy for healthy eating, consume more fruit and vegetables and less soft drinks (Fruh et al., 2011; Neumark-Sztainer et al., 2010). Studies have shown a positive correlation between family meal frequency and healthy child and adolescent body mass index (BMI) (Berge et al., 2012; Anderson and Whitaker, 2010). It is also argued that an ability to cook has an impact on an individual's competency to exercise control over their diet and make informed decisions with regard to food choices (Caraher et al, 1999; Lang & Caraher, 2001). Szabo (2011) urges families and individuals to re-connect and re-engage with food by cooking from scratch and consequently move away from the consumption of convenience foods. Whilst Lichtenstein and Ludwig (2010) are emphatic in the fact that children who are not exposed to cooking and feel uncomfortable in the kitchen will be at a disadvantage for their entire life.

8 December 2016

Schools have been identified as playing an important role in the early development of food and cooking skills (McCloat and Caraher, 2016; Caraher et al., 2013). International research suggests that family meals may have an important role to play in preventing obesity and establishing healthy food practices (Berge et al., 2012; Chan and Sobal, 2011; McIntosh et al., 2009). Woodruff and Kirby (2013) purport that an effective public health strategy to promote healthy food behaviours should involve encouraging frequent healthy family meals. In the ROI Home Economics is an established, but optional, secondary school subject on the curriculum. At junior level (11-15 year olds) the subject aims to develop students' knowledge and practical skills of food including nutritional knowledge, shopping, menu planning, food budgeting, food safety and hygiene, food labels, practical cookery skills etc. (Department of Education, 1990). In NI Home Economics is part of the minimum requirement for every student at Key Stage 3 (11-15 year olds). This curriculum aims to develop students' knowledge and practical skills in the choice, preparation, storage cooking and serving of food (CCEA, 2016). Lichtenstein and Ludwig (2010) state that the school curriculum needs to provide adolescents with the practical skills required to become confident in the selection, handling and preparation of natural food ingredients. They believe that by having home economics on the curriculum young people will have the necessary skills to lead long and healthy lives. This is further reiterated by McCloat and Caraher (2016) who identified Home Economics education as a food education intervention required to address the societal and (ill)health changes which are occurring at a population level.

Family meals can have a positive impact on nutrition and dietary intake with reports suggesting that adolescents who have frequent family meals have higher self-efficacy for healthy eating, consume more fruit and vegetables and less soft drinks (Fruh et al., 2011; Neumark Sztainer et al., 2010). Studies have shown a positive correlation between family meal frequency and healthy child and adolescent body mass index (BMI) (Berge et al., 2012; Anderson and Whitaker, 2010). It is also argued that an ability to cook has an impact on an individual's competency to exercise control over their diet and make informed decisions with regard to food choices (Caraher et al., 1999; Lang & Caraher, 2001). Szabo (2011) urges families and individuals to reconnect and re-engage with food by cooking from scratch and consequently move away from the consumption of convenience foods. Whilst Lichtenstein and Ludwig

8 December 2016

~~(2010) are emphatic in the fact that children who are not exposed to cooking and feel uncomfortable in the kitchen will be at a disadvantage for their entire life.~~

Convenience is now one of the key influences impacting on food choice selection (Jackson and Viehoff, 2016). Commercially prepared meals and convenience foods are readily available and can be obtained as either ready-to-heat or frozen ready meals at an affordable price for families. Changing meal patterns have led parents to become more disassociated with food and will result in less frequent cooking and hands on meal preparation whilst increasing their consumption of snack and convenience foods (Woodruff and Kirby, 2013). Recent research [\(Bord Bia, 2013\)](#) in Ireland and Great Britain identified that the majority of adults in both the ROI (76%) and Great Britain (78%) choose foods that are easy to prepare and to cook. However, 42% of ROI adults and 49% of Great British adults agreed that convenience meals are a good substitute for home cooked meals when time is limited (Bord Bia, 2013). With ready-made meals so easily available, Simmons and Chapman (2011) query as to why families would bother cooking a meal at home when skills such as meal planning, food preparation, shopping and having access to physical resources are all pre-requisites. Mc Gowan et al, (2015) notes that that the increasing use of such convenience products demonstrate a correlated reduction in the frequency and time spent preparing meals using fresh and basic ingredients in the UK.

~~According to~~ Soliah, Walter and Jones (2012) [identified](#) a key barrier to cooking meals is lack of food preparation and cooking skills. Recent reviews by McGowan et al, (2015) and the Government of Canada (2010) identified the important relationship between food preparation, cooking skills and healthy food choices of families. They highlighted low self-efficacy and self-confidence in cooking as a barrier to healthy food choices. Beshara, Hutchinson and Wilson (2010) acknowledged food preparation and cooking confidence in mothers as an important predictor of meal healthiness. They found mothers who were less confident in cooking a healthy meal were more likely to prioritise the use of convenience foods and fast food instead of preparing a healthy meal for the family.

Furthermore, whilst some have argued that cooking skills are in decline due to a ‘deskilling’ of individuals and a reliance on convenience foods (McGowan et al.,

8 December 2016

2015; Caraher, 2013; Lang & Caraher, 2001; Caraher & Lang, 1999); others refer to it as a 'transition' or a change in cooking and food preparation behaviours and a move away 'from scratch' cooking (Caraher & Lang, 1999, Government of Canada, 2010). Dougherty and Silver (2007) maintain that cooking 'from scratch' skills are being lost among children and adolescents particularly as families utilise prepared meals and convenience foods. By not involving children in food preparation at meal times, Soliah, Walter and Jones (2012) argue that children are less likely to have an opportunity to develop cooking skills at home.

To date little is known on the role parents play in the provision and type of meals in the home setting and their implications on health. In addition, there is limited research on understanding the food preparation and cooking skills of parents particularly on the IOI. The purpose of this paper is to examine the self-reported food skills, cooking confidence and practices amongst a sample of parents on the IOI

Methods

A paper based survey was conducted across the ROI and NI. Surveys were administered by the field researchers and collected from the participants after 10 days. An information letter to parents outlined the nature of the study and a consent form was provided. No incentive was used within this study. Ethics permission for the survey was granted by University Ulster Research Ethics Committee.

Sampling

A pilot was conducted with 10 parents in NI and ROI. Following some amendments to the survey, data collection took place in the spring of 2014. A total of 363 parents on the IOI took part in the survey (218 from the ROI and 145 from NI). Participants were obtained from a convenience sample located near each university campus (Sligo and Coleraine). They were recruited via local schools, email utilising the University and College email databases, social media, community outlets and centres, Family Resource Centres, family and friends, community family events. All participants were parents (n=363) and overall 90 ~~per-cent~~percent of respondents declared responsibility for either the 'majority' or 'all' of the cooking in the household, 91 ~~per~~

8 December 2016

1
2
3 | ~~percent~~ were female and 9 ~~per-cent~~ male. All participants had to be over
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

18 years old to complete the survey.

The Questionnaire

Based on ~~the published studies and the literature~~, ~~literature~~, an original -survey was developed which included measures on parents perceived cooking skills and cooking behaviours. Participants *feelings towards cooking* were measured using items relating to cooking enjoyment (rated on a 5-point scale from strongly agree to strongly disagree) and questions relating to attitudes towards cooking (one closed-ended question with a one-choice answer option including “enjoyable” or “chore” and an open ended option for participant to explain the answer). Measures relating to *family members involvement in cooking* included one closed-ended question with a one-choice answer option including “yes” or “no” and an open ended option for participant to explain the answer. Questions on the type of preparation (one closed-ended question with 5 one-answer options) were included in order to measure cooking styles, frequency of scratch cooking (rated on a 5-point scale from daily to never) and cooking confidence (rated on a 7-point scale from extremely confident to not at all confident). Measures relating to the *learning of cooking skills* included one question where participants gained their basic cooking skills (one closed-ended question with 10 one-answer options). *Cooking skills* measures included items relating to specific cooking behaviours (e.g. I cook a separate meal for my children, I bake fresh bread from scratch etc.) were rated on a 5-point frequency scale from always to never). *Eating habits* measures included participant consumption of fruit, vegetables, pasta/rice, potatoes and fish (rated on an 8-point frequency scale from never to 3 times a day or more). Nutrition knowledge was measured by asking participants to identify how many portions of fruit and vegetables certain product items contain (e.g. one small raspberry yoghurt (rated on 4-point scale from 0 to 3 and “Don’t know”). Measures relating to the *cooking behaviours* (e.g. I cook a separate meal for my children, I bake fresh bread from scratch etc) were rated on a 6-point frequency scale from 1 equalling always to 5 equalling never and 6 equalling don’t know). Qualitative data obtained from open ended questions. Demographics (e.g. country of residence, household size, gender and socio-economic status) were also obtained.

8 December 2016

Data analysis

All data was inputted and analysed using the SPSS (SPSS, 2013, version 21). As sampling took place in two jurisdictions initial analysis using t-tests and chi-square, as appropriate, explored the differences between the ROI and NI. In this paper we focus on the self-reported food skills, cooking confidence and practices of parents in both jurisdictions of NI and ROI.

Limitations

A methodological limitation of the study includes, at the time of distribution of the survey, a lack of prior quantitative research conducted within the area of cooking skills to enable the use of existing validated measures to inform the development of the survey. In addition, further development of some survey questions is required to allow items to be measured on a 5-point Likert scale. The use of self-reported data must also be highlighted as potential bias can occur relating to selective memory and honesty of reporting.

Results

Demographics

Three-hundred-sixty-three (363) parents completed the survey. Two-hundred eighteen (218) respondents came from the ROI which accounted for 60 percent of the sample. Of these, 91 percent were female and 9 percent were male. One-hundred-forty-five (145) came NI which accounted for 40 percent of the overall sample. Of these, 91 percent of parents were females and 9 percent were male.

In analysing the socio-economics status, 49 percent (179) of parents did not disclose weekly income and were removed from the analysis pertaining to how much they had to live on each week leaving 184 parents who did respond. Of the parents from the ROI, 4 percent lived on less than €100/week, 1 percent on €100-€150 a week, 3 percent had an income of €151-€200, 7 percent had a weekly income of €201-€250, 18 percent lived on €251-€300, 56 percent had a weekly income of €301-€400; 6

8 December 2016

percent lived on more than €401 a week; 5 percent claimed “None of the above”. of the parents from the NI the income (£) was as follows: 4 percent lived on £100-£150 a week, 7 percent lived on £151-£200 a week, 12 percent lived on £201-£250, 29 percent on £251-£300, 47 percent lived on £301-£400 a week, and 1 percent lived on more than £401 per week.

Learning of basic cooking skills

The majority (75 ~~per-cent~~percent) of parents on the IOI learned their cooking skills from their mother. The second most common source of learning accounting for 43 ~~per-cent~~percent of parents was at secondary school in either Home Economics classes in the ROI and Home Economics / Food Technology class in NI. The third (30 ~~per-cent~~percent) most popular source of learning cooking skills was cookery books followed by cookery programmes at 22 ~~per-cent~~percent. Only 9.7 ~~per-cent~~percent of parents learned basic cookery skills from cookery websites.

Attitudes towards cooking

Results showed that the majority of parents (65 percent) enjoyed cooking meals from scratch. There was, however, a significant difference in ~~parents~~parents’ enjoyment of cooking between jurisdiction where the ROI parents found cooking more enjoyable than NI parents ($\chi^2=17.890$, $df=2$, $p<0.001$).

Results from both jurisdictions found that only 30 ~~per-cent~~percent of parents described cooking as a chore. The qualitative data, obtained from open ended questions, highlighted that for some parents cooking during the week was a chore due to time constraints but for the majority of parents, cooking at the weekends was perceived to be an enjoyable task as time allowed them to be more adventurous in their choice of meal to cook. Comments such as “the pressure of getting food quickly onto the table after a full day at work” means that weekday dinners can be “repetitive and boring” reinforced this issue.

8 December 2016

Cooking confidence

In the total sample, cooking confidence was higher among the ROI parents. When cooking and preparing new foods that they had not come across before, Measuring individual cooking confidence revealed that 25 per centpercent of ROI and 19 per centpercent of NI parents felt “extremely confident” when cooking and preparing new foods that they had not come across before. Forty sixForty-six percent of ROI parents felt “extremely confident” with cooking from basic ingredients as opposed to 38 per centpercent of NI parents. Furthermore, 60 per centpercent of ROI versus 46 per centpercent of NI parents were “extremely confident” in following simple recipe instructions while 38 per centpercent of ROI and 29 per centpercent of NI parents were “extremely confident” about tasting new foods.

Cooking style

With regard to food preparation methods, there are significant statistical differences between parents in NI and the ROI in relation to the use of convenience products; ready-made meals and assembling ready-made ingredients to complete a meal.

With regard to cooking style, parents in NI were more likely to use convenience foods such as ready meals and to assemble readymade ingredients to complete a meal. As can be seen in the breakdown of results (Figure 1), parents in NI scored significantly ~~higher~~ (higher ($\chi^2=56.167$, $df=1$, $p<.001$) in their use of convenience meals with 43 ~~per centpercent~~ of parents in NI reported utilising convenience foods as opposed to only 9 ~~per centpercent~~ of parents in the ROI. Also, 61 ~~per centpercent~~ of parents in NI were found to be significantly higher ($\chi^2=16.767$, $df=1$, $p<.001$) users of pre-prepared and readymade ingredients in the assembly of meals compared to only 42 ~~per centpercent~~ of parents in the ROI. percent

Insert Figure 1 here

Figure 1: Frequencies of Cooking Style

8 December 2016

Barriers to cooking from scratch

Twenty-five percent of the total sample claimed to cook from scratch on a daily basis and 96% of the total sample claimed to cook from scratch at least once a week. Half (51 ~~per-cent~~percent) of ROI parents and 49 ~~per-cent~~percent NI parents, identified several barriers to cooking from scratch. Time constraints were named by parents as the main barrier to cooking ‘from scratch’. Other qualitative examples cited included shift work and full time employment with the parents explaining that they were “*just too tired*” to think about cooking a meal from scratch. Not prioritising cooking amidst other tasks was identified as a second barrier to cooking from scratch. Parents stated that working full-time, coupled with busy children, meant that families had “*better things to do*”, “*other things to get on with*” than cooking a meal from scratch.

A third barrier reported by parents was a lack of cooking skills, “*I just don’t know how*”, as too did the “*lack of certain ingredients needed*” for some from scratch recipes. Parents revealed they were likely to make dinners from “*whatever ingredients*” were in the house rather than selecting unusual ingredients in other recipes and indeed linked to this was the barrier of cost. Other qualitative comments also revealed that parents believed that cooking from scratch was more complicated than cooking with readymade ingredients or convenience foods. For example some parents thought it a waste of time to make sauces from scratch when it was available pre-made in a jar. Parents also explained that from scratch dishes need more ingredients which can be off putting from a cost perspective as “*the cost of food has risen so that’s off-putting*”.

Cooking practices

There were apparent differences between the jurisdictions in the different types of cooking techniques and applications executed by parents (Table I). For instance chopping and cooking fresh vegetables was more common in the ROI than in NI. Also ROI parents were less likely than NI parents to use prepared frozen vegetables and tinned vegetables. Roasting meat was also more common in the ROI in

8 December 2016

comparison to parents in NI as was the cooking of breaded frozen fish. Baking as a culinary application was more common amongst ROI parents than NI parents. Similarly, with regard to making bread ROI parents were more likely to bake bread from scratch when compared to parents from NI

Insert Table ~~H~~1 here

Table 1: Cooking Practices

Eating Habits

An analysis of parent's consumption patterns relating to fruit, vegetables, pasta and rice, potatoes, fish and fish products was conducted (Table II) across week and day frequencies. Results indicate that ROI parents ate more vegetables and salad, fish & fish products, and baked, boiled, and mashed potatoes compared to NI parents.

Insert Table ~~H~~2 here

Table 2: Eating Habits

Involving family members in the cooking

The majority of parents in the ROI (80 ~~per cent~~percent) versus fifty nine percent of parents in NI involved family members in the cooking process, this result was statistically significant ($\chi^2=17.939$, $df=1$, $p<.001$). Qualitative comments outlined examples of cooking activities which would be executed by young children and teenagers alongside their parents including: chopping vegetables, stirring saucepans or cutting out scones. Parents involved their young children and teenagers in the cooking process, usually by "*chopping veg*" and "*stirring*" while they "*cook up*". Children seemed to be particularly involved in baking and "*cutting scones*". Parents felt it was important to involve their kids in the cooking process, teaching them a "*basic skill*" so that they can have it going into adulthood "*I think it is important to get the children involved as soon as they are able*". Some also involved their children as they felt their children were interested and able to cook alongside them, "*My daughter often chops veg and makes bread, buns and cakes, also helped me make pizza dough*". The negative qualitative comments included "*children not interested*" and "*time pressure*"

8 December 2016

for reasons not to permit family member involvement. Results also showed that parents from the ROI (58 ~~per-cent~~percent) were less likely to make separate meals for their children compared to parents in NI (31 ~~per-cent~~percent).

Discussion

To the best of our knowledge, the present study is the first one that examines food skills, cooking confidence and practices amongst parents on the IOI identifying jurisdictional differences between Northern Ireland and the Republic of Ireland.

The findings suggest that the majority of participants enjoyed cooking meals from scratch with few parents viewing it as a chore. The results from this study provide empirical evidence of the link between cooking enjoyment and the likelihood to cook from scratch using fresh ingredients. Parents from ROI ate significantly less convenience foods and complete meals using readymade ingredients (such as jarred sauces) when compared to NI parents. Parents from NI cooked from scratch ingredients significantly less often than ROI parents. Parents who thought cooking was a chore cooked from scratch less often than those that enjoyed cooking. The reliance of NI counterparts on convenience foods and readymade ingredients indicates a possible paradigm shift in cooking perceptions as meal assembly and reheating prepared foods has become an acceptable cooking practice. Lichtenstein and Ludwig (2010) highlight that due to parental reliance on take away food, frozen meals and prepared package foods, many children seldom get the opportunity to taste a home cooked meal much less be exposed to the ingredients that go into making one. They also believe that having home economics as a mandatory part of the school curriculum would transform meal preparation from a daunting chore into a manageable and fulfilling activity.

This study confirmed that time was the main barrier to cooking from scratch using fresh ingredients. Other results showed cooking confidence, lack of prioritisation, limited cooking skills and knowledge, and cost as barriers to cooking from scratch. A study by Beck (2007) found that most evening meals included processed commercial

8 December 2016

food (e.g. ready to eat or convenience food) in at least moderate amounts, with the use of these foods saving approximately 12 minutes of hands on cooking time. Similarly, Lavelle et al, (2016) highlighted barriers to scratch cooking including time pressures; saving money; desire for effortless meals; family food preferences and effect of kitchen disasters.

The results in this study have also shown that cooking confidence has an impact on meal preparation. McGowan et al, (2015) identified low self-confidence in cooking as a barrier to healthy food choices. Lavelle et al (2016) noted that a key facilitator to cooking from scratch was self-efficacy and confidence in one's cooking ability. Furthermore, in a study by Beshara, Hutchinson and Wilson (2010), mothers who were less confident in cooking a healthy meal were more likely to prioritise the use of convenience foods instead of preparing a healthy meal for the family. The results demonstrate that the majority of parents had learned their basic cookery skills from their mother or from established cookery lessons in the school environment, such as Home Economics or Food Technology classes. In contrast new skills were learned independently such as through cookery books and cookery programmes. These findings are consistent with the literature to date and highlight the key role parents, more specifically mothers, play in preparing meals for the family and developing food and cooking skills within the domestic setting (Van der Host, Ferrage and Rytz, 2014). The importance of Home Economics on the national curriculum in both jurisdictions must also be acknowledged. Lichtenstein and Ludwig (2010) state that home economics in schools is crucial to ensuring that both boys and girls have the basic principles of food preparation they need to feed themselves and their families within the current food environment. Indeed, they call it a "version of hunting and gathering" for the 21st century and they believe that home economics education must be part of the long term solution in tackling childhood obesity.

This study reported a number of statistically significant differences across the two jurisdictions (ROI and NI), however, one of the most interesting results highlighted a reticence among NI parents to involve family members in the cooking process and a reliance on processed food while cooking. Another notable difference revealed that ROI counterparts were less likely to cook a separate meal for their children than NI

8 December 2016

counterparts further suggesting that the role of family involvement in cooking is vital for improving a child’s willingness to try or eat the same meal as other family members. These results are similar to those described in Beck (2007). More recently, one study demonstrated that by involving children in cooking activities and meal preparation their willingness to taste novel foods increased (Alloiret et al, 2016). Therefore, the findings from our study may contribute to understanding the need to involve family members, specifically children, in the domestic cooking process. These associated cooking practices highlight an opportunity to develop cooking interventions which involve more than one family member as this might have a positive effect on the types of meals prepared and foods used while cooking. A study by Chu et al. (2014) of 10 – 12 year boys found that those children with a higher level of food involvement in the home were associated with a higher fruit and vegetable intake and better diet quality. Therefore, the sharing of cooking responsibility within a household may not only promote social cohesion within the family but have positive implications on dietary quality.

Conclusions

The present study explores the self-reported food skills, cooking confidence and practices amongst a sample of parents on the Island of Ireland (IOI). Though further studies are necessary in other contexts, the results of this study provide evidence to suggest that parents, specifically mothers, play a central role in developing food skills of children. The results also demonstrate that parents would benefit from exposure to targeted interventions to develop their food skills and cooking confidence within the domestic setting. Realistically, practical cookery sessions using quick nutritious family friendly recipes would need to be devised as part of these interventions. The development of such interventions could lead to improvements in parents’ food skills and facilitate more opportunities for parents to model healthy cooking and food related behaviours. Furthermore, the role of home economics in the school setting warrants further exploration as it is the only subject which teaches the actual practical food skills required by adolescents and their families.

8 December 2016

Acknowledgements:

See additional pages for figures and tables

References:

Allrot, X., da Quinta, N., Chokupermal, K. and Urdaneta, E. (2016). Involving children in cooking activities: A potential strategy for directing food choices towards novel food containing vegetables. *Appetite* 103 (2016) 275-285.

Anderson S.E. and Whitaker R.C. (2010). Household routines and obesity in US preschool-aged children. *Paediatrics*, 125(3):420-8.

Beck, M. (2007) Dinner preparation in the modern United States. *British Food Journal*, 109 (7) (2007), pp. 531–547.

Berge, J.M., MacLehose, R.F., Loth, K., Eisenberg, M., Fulkerson, J. Neumark-Sztainer, D. (2012) Family meals. Associations with weight and eating behaviors among mothers and fathers. *Appetite*, 58(3), pp.1128-1135.

Beshara M., Hutchinson A., Wilson C. (2010). Preparing meals under time stress. The experience of working mothers. *Appetite*, 55(3): pp.695-700

Bord Bia (2013) Periscope 2013: Irish and British diets – consumers and their food. Available at:
<http://www.bordbia.ie/industry/manufacturers/insight/publications/bbreports/PERIscope6/PERIscope2013SummaryReports/Periscope%207%202013%20Summary%20Report-Ireland%20and%20GB.pdf>

8 December 2016

Caraher, M., Dixon, P., Lang, T., and Carr-Hill, R (1999) The state of cooking in England: The relationship of cooking skills to food choice. *British Food Journal*, 101 (8) (1999), pp. 590–609

Caraher, M., Seeley, A., Wu, M., & Lloyd, S. (2013). When chefs adopt a school? An evaluation of a cooking intervention in English primary schools. *Appetite*, 62.

[CCEA, Council for the Curriculum, Examinations and Assessment \(2016\). Home Economics. Key Stage 3 Non Statutory Guidance for Home Economics. Available at: http://ccea.org.uk/sites/default/files/docs/curriculum/area_of_learning/learning_life_work/home_ec/ks3_home_eco_nonstat_guidance.pdf](http://ccea.org.uk/sites/default/files/docs/curriculum/area_of_learning/learning_life_work/home_ec/ks3_home_eco_nonstat_guidance.pdf)

Chan, J.C., and Sobal, J., (2011). Family meals and body weight. Analysis of multiple family members in family units, *Appetite*, 57(2), pp.517-524.

Chu, Y. L., Storey, K. E., & Veugelers, P. J. (2014). Involvement in meal preparation at home is associated with better diet quality among Canadian children. *Journal of Nutrition Education and Behavior*, 46(4).

[Department of Education \(1990\) *The Junior Certificate Home Economics Syllabus*. Dublin: The Stationery Office.](#)

Dougherty, K. and Silver C (2007). Chef-nutritionist teams spark enjoyment and learning in cooking education series for 8- to 12-year-olds. *Journal Nutrition Education Behaviour*, 39(4):237-8.

Fruh, S., Fulkerson, J., Mulekar, M., Kendrick, L., and Clanton, C. (2011). The Surprising Benefits of the Family Meal. *The Journal of Nurse Practitioners*. Volume 7, Issue 1, January 2011.

Gandy, J. (Ed) (2014). *The manual of dietetic practice* 5th edition. Oxford Wiley Blackwell.

8 December 2016

Government of Canada (2010). Improving cooking and food preparation skills: A Synthesis of the Evidence to Inform Program and Policy Development. Available at: http://www.hc-sc.gc.ca/fn-an/alt_formats/pdf/nutrition/child-enfant/cfps-acc-synthes-eng.pdf

Jackson, P. and Viehoff, V., (2016). Reframing convenience food. *Appetite*, 1;98:1-11.
Krølner, R., Rasmussen, M., Brug, J., Klepp, K.I., Wind, M. and Due, P. (2011). Determinants of fruit and vegetable consumption among children and adolescents: a review of the literature. *International Journal of Behavioral Nutrition and Physical Activity*, 8: 112.

Lang, T. and Caraher, M. (2001). 'Is there a culinary skills transition? data and debate from the UK about changes in cooking culture', *Journal of the Home Economics Institute of Australia*, 8 (2), pp.2–14.

Lavelle, F., McGowan L., Spence, M. Caraher, M., Raats, M., Hollywood, L. McDowell, D., McCloat, A. Mooney, E. Dean, M. (2016). Barriers and facilitators to cooking from 'scratch' using basic or raw ingredients: A qualitative interview study. *Appetite* Volume 107, 1 December 2016, pp. 383–391.

Lichtenstein, A.H. and Ludwig, D.S. (2010). 'Bring Back Home Economics Education', *Journal of the American Medical Association*, 303(18), pp.1857-1858.

McCloat, A. and Caraher, M. (2016). Home Economics as a food education intervention: lessons from the Irish secondary education context. *Education and Health*, Vol. 34, Number 4, 2016

McGowan, L., Caraher, M., Raats, M., Lavelle, F., Hollywood, F., McDowell, et al. (2015). Domestic cooking and food skills: A review. *Critical Reviews in Food Science and Nutrition*.

McGowan, L., Pot, G.K., Stephen, A.M., Spence, M., Raats, M., Lavelle, F., et al., (Under Review) (2016). The influence of socio demographic, psychological and knowledge related variables alongside perceived cooking and food skills abilities in

8 December 2016

the prediction of diet quality in adults: A nationally representative cross sectional study. International Journal of Behavioral Nutrition and Physical Activity.

McIntosh, J.E., Long, C.M. and Wells, Y.D. (2009). Children beyond dispute: A four year follow up study of outcomes from Child focused and Child inclusive post separation family dispute resolution. <https://www.ag.gov.au/Publications/Documents/ArchivedFamilyLawPublications/Report1.pdf>

Neumark-Sztainer, D., Hannan, P., Story, M., Croll, J. (2003). Family meal patterns: Associations with socio demographic characteristics and improved dietary intake among adolescent. Journal of the American Dietetic Association. Volume 103 Number 3 March 2003.

Pearson N., Biddle S.J., and Gorley, T. (2009). Family correlates of breakfast consumption among children and adolescents. A systematic review. Appetite, 52(1):1-7.

Safefood (2016). Childhood Obesity: The Facts. Available at <http://www.safefood.eu/Childhood-Obesity/Facts.aspx> [Accessed 12th February 2016]

Simmons, D., and Chapman, G. (2012). The significance of home cooking within families. British Food Journal, Vol. 114 Iss 8 pp. 1184 – 1195.

Soliah, L., Walter, J., and Jones, S. (2012). Benefits and Barriers to Healthful Eating: What Are the Consequences of Decreased Food Preparation Ability? American Journal Lifestyle Medicine. April 2012.

Szabo, M. (2011). The Challenges of “Re-engaging with Food”. Food, Culture and Society. Volume 14 Issue 4 December 2011.

Van der Horst, K., Brunner, T.A., Siegrist, M. (2011) Ready-meal consumption: Associations with weight status and cooking skills. Public Health Nutrition, 14 (02) (2011), pp. 239–245

8 December 2016

Woodruff, S., & Kirby, A. (2013). The Associations Among Family Meal Frequency, Food Preparation Frequency, Self-efficacy for Cooking, and Food Preparation Techniques in Children and Adolescents. *Journal of Nutrition Education and Behavior*. Volume 45, Number 4, 2013.

Worsley, T., Wang, W. C., Wijeratne, P., Ismail, S., & Ridley, S. (2015). Who cooks from scratch and how do they prepare food? *British Food Journal*, 117(2).

Wrieden, W. L., Anderson, A. S., Longbottom, P. J., Valentine, K., Stead, M., Caraher, M. and Dowler, E. (2007). The impact of a community-based food skills intervention on cooking confidence, food preparation methods and dietary choices an exploratory trial. *Public Health Nutrition*, 10(02).

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

British Food Journal

		Always (%)		Often
		NI	ROI	NI
1				
2				
3				
4	Cook fresh vegetables	32	55	34
5	Cook main meal with chicken breast	9	15	54
6	Roast meat in the oven	12	19	27
7	Cook main meal with minced beef	6	8	48
8	Cook with fresh fish	2	5	20
9	Cook with breaded / frozen fish	17	1	37
10	Cook a Stir Fry	2	3	23
11	Use jar / packet sauce when preparing a main meal	1	2	29
12	whisk eggs to make scrambled eggs	17	28	28
13	Make sauce from scratch	34	14	19
14	Bake a sponge cake	5	6	15
15	Bake fresh bread	1	10	4
16	Use prepared frozen vegetables for main meal	1	1	15
17	Use tinned vegetables as part of main meal	2	1	2
18	Make Homemade soup from fresh ingredients	16	24	25
19	Cook Potatoes	15	35	57
20	Make your own lunch	31	54	39
21	Make children's lunch	44	73	26
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

n (%)	Sometimes (%)		Rarely (%)		Never (%)	
	ROI	NI	ROI	NI	ROI	NI
3	ROI	NI	ROI	NI	ROI	NI
4	36	27	7	6	2	1
5	56	29	24	6	5	2
6	48	35	26	15	5	12
7	49	40	34	4	6	2
8	24	30	43	27	21	21
9	12	37	43	9	35	1
10	36	42	36	23	17	9
11	20	41	42	23	25	6
12	35	37	32	6	4	13
13	18	20	20	14	24	13
14	10	20	32	20	24	40
15	11	11	24	16	24	67
16	8	38	32	28	38	19
17	6	42	20	28	30	26
18	30	33	23	16	14	10
19	58	24	6	4	2	0
20	28	20	11	7	5	4
21	12	16	6	9	1	5
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Eating Habits		Never (%)	
<i>How often do you eat ...</i>		NI	ROI
Fruit		2	1
Vegetables & Salad (excluding potatoes)		0	1
Pasta & Rice		2	1
Baked, Boiled or Mashed Potatoes		1	1
Chips, Fried or Roast Potatoes		2	5
Fish or Fish Products		16	8

British Food Journal

Less than once week (%)		Once a week (%)		Two - four times a week (%)		five-six ti
NI	ROI	NI	ROI	NI	ROI	NI
3	4	2	4	31	26	23
3	3	1	3	35	14	19
3	9	23	28	63	55	8
6	2	13	4	59	55	18
22	38	39	40	28	14	9
27	14	33	45	23	29	1

1							
2	mes week (%)	once a day (%)		Twice a day (%)		Three times or more a day (%)	
3	ROI	NI	ROI	NI	ROI	NI	ROI
4	14	15	20	15	19	8	12
5	28	24	55				
6	5	1	1				
7	27	3	11				
8	1	1	1				
9	2	1	1				
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							

British Food Journal