



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

McCloat, A., Mooney, E., & Hollywood, L. E. (2017). Have Irish parents put cooking on the back burner? An Island of Ireland study of the food skills, cooking confidence and practices of parents. *British Food Journal*, 119(5), 992-1002. <https://doi.org/10.1108/BFJ-09-2016-0440>, <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 (in print/issue): 02/05/2017

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

Document Version
Author Accepted version

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**Have Irish parents put cooking on the back burner?
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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

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.

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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

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3 recommendations of five plus servings of fruit and vegetable daily. Children's
4 portion sizes have increased over the last number of years with saturated fat and sugar
5 consumption both over recommended levels. Indeed one fifth of children's dietary
6 energy intake comes from sugar sweetened beverages, chocolate and confectionary
7 (Safefood, 2016).
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13 Due to the negative health implications of childhood obesity and the evidence of
14 certain less healthy eating habits there is an increased impetus on the adoption of a
15 healthy lifestyle on the island. Consequently, the role of parental cooking skills and
16 their impact on family meals requires further investigation. International research
17 suggests that family meals may have an important role to play in preventing obesity
18 and establishing healthy food practices (Berge et al., 2012; Chan and Sobal, 2011;
19 McIntosh et al., 2009). Woodruff and Kirby (2013) purport that an effective public
20 health strategy to promote healthy food behaviours should involve encouraging
21 frequent healthy family meals. Lichtenstein and Ludwig (2010) state that the school
22 curriculum needs to provide adolescents with the practical skills required to become
23 confident in the selection, handling and preparation of natural food ingredients. They
24 believe that by having home economics on the curriculum young people will have the
25 necessary skills to lead long and healthy lives.
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36 Family meals can have a positive impact on nutrition and dietary intake with reports
37 suggesting that adolescents who have frequent family meals have higher self-efficacy
38 for healthy eating, consume more fruit and vegetables and less soft drinks (Fruh et al.,
39 2011; Neumark-Sztainer et al., 2010). Studies have shown a positive correlation
40 between family meal frequency and healthy child and adolescent body mass index
41 (BMI) (Berge et al., 2012; Anderson and Whitaker, 2010). It is also argued that an
42 ability to cook has an impact on an individual's competency to exercise control over
43 their diet and make informed decisions with regard to food choices (Caraher et al,
44 1999; Lang & Caraher, 2001). Szabo (2011) urges families and individuals to re-
45 connect and re-engage with food by cooking from scratch and consequently move
46 away from the consumption of convenience foods. Whilst Lichtenstein and Ludwig
47 (2010) are emphatic in the fact that children who are not exposed to cooking and feel
48 uncomfortable in the kitchen will be at a disadvantage for their entire life.
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3 Convenience is now one of the key influences impacting on food choice selection
4 (Jackson and Viehoff, 2016). Commercially prepared meals and convenience foods
5 are readily available and can be obtained as either ready-to-heat or frozen ready meals
6 at an affordable price for families. Changing meal patterns have led parents to become
7 more disassociated with food and will result in less frequent cooking and hands on
8 meal preparation whilst increasing their consumption of snack and convenience foods
9 (Woodruff and Kirby, 2013). Recent research in Ireland and Great Britain identified
10 that the majority of adults in both the ROI (76%) and Great Britain (78%) choose
11 foods that are easy to prepare and to cook. However, 42% of ROI adults and 49% of
12 Great British adults agreed that convenience meals are a good substitute for home
13 cooked meals when time is limited (Bord Bia, 2013). With ready-made meals so
14 easily available, Simmons and Chapman (2011) query as to why families would
15 bother cooking a meal at home when skills such as meal planning, food preparation,
16 shopping and having access to physical resources are all pre-requisites. Mc Gowan et
17 al, (2015) notes that that the increasing use of such convenience products demonstrate
18 a correlated reduction in the frequency and time spent preparing meals using fresh and
19 basic ingredients in the UK.
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33 According to Soliah, Walter and Jones (2012) a key barrier to cooking meals is lack
34 of food preparation and cooking skills. Recent reviews by McGowan et al, (2015) and
35 the Government of Canada (2010) identified the important relationship between food
36 preparation, cooking skills and healthy food choices of families. They highlighted low
37 self-efficacy and self-confidence in cooking as a barrier to healthy food choices.
38 Beshara, Hutchinson and Wilson (2010) acknowledged food preparation and cooking
39 confidence in mothers as an important predictor of meal healthiness. They found
40 mothers who were less confident in cooking a healthy meal were more likely to
41 prioritise the use of convenience foods and fast food instead of preparing a healthy
42 meal for the family.
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51 Furthermore, whilst some have argued that cooking skills are in decline due to a
52 'deskilling' of individuals and a reliance on convenience foods (McGowan et al.,
53 2015; Caraher, 2013; Lang & Caraher, 2001; Caraher & Lang, 1999); others refer to it
54 as a 'transition' or a change in cooking and food preparation behaviours and a move
55 away 'from scratch' cooking (Government of Canada, 2010). Dougherty and Silver
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(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*

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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.

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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 ($x^2=17.890$, $df=2$, $p<0.001$).

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*”

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3 after a full day at work” means that weekday dinners can be “repetitive and boring”
4 reinforced this issue.
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8 **Cooking confidence**

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

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28 With regard to food preparation methods, there are significant statistical differences
29 between parents in NI and the ROI in relation to the use of convenience products;
30 ready-made meals and assembling ready-made ingredients to complete a meal.
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35 With regard to cooking style, parents in NI were more likely to use convenience foods
36 such as ready meals and to assemble readymade ingredients to complete a meal. As
37 can be seen in the breakdown of results (Figure I), parents in NI scored significantly
38 higher ($\chi^2=56.167$, $df=1$, $p<.001$) in their use of convenience meals with 43 per cent
39 of parents in NI reported utilising convenience foods as opposed to only 9 per cent
40 of parents in the ROI. Also, 61 per cent of parents in NI were found to be significantly
41 higher ($\chi^2=16.767$, $df=1$, $p<.001$) users of pre-prepared and readymade ingredients in
42 the assembly of meals compared to only 42 per cent of parents in the ROI.
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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

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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).

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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.

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3 The results in this study have also shown that cooking confidence has an impact on
4 meal preparation. McGowan et al, (2015) identified low self-confidence in cooking as
5 a barrier to healthy food choices. Lavelle et al (2016) noted that a key facilitator to
6 cooking from scratch was self-efficacy and confidence in one's cooking ability.
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8 Furthermore, in a study by Beshara, Hutchinson and Wilson (2010), mothers who
9 were less confident in cooking a healthy meal were more likely to prioritise the use of
10 convenience foods instead of preparing a healthy meal for the family. The results
11 demonstrate that the majority of parents had learned their basic cookery skills from
12 their mother or from established cookery lessons in the school environment, such as
13 Home Economics or Food Technology classes. In contrast new skills were learned
14 independently such as through cookery books and cookery programmes. These
15 findings are consistent with the literature to date and highlight the key role parents,
16 more specifically mothers, play in preparing meals for the family and developing food
17 and cooking skills within the domestic setting (Van der Host, Ferrage and Rytz,
18 2014). The importance of Home Economics on the national curriculum in both
19 jurisdictions must also be acknowledged. Lichtenstein and Ludwig (2010) state that
20 home economics in schools is crucial to ensuring that both boys and girls have the
21 basic principles of food preparation they need to feed themselves and their families
22 within the current food environment. Indeed, they call it a "version of hunting and
23 gathering" for the 21st century and they believe that home economics education must
24 be part of the long term solution in tackling childhood obesity.
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40 This study reported a number of statistically significant differences across the two
41 jurisdictions (ROI and NI), however, one of the most interesting results highlighted a
42 reticence among NI parents to involve family members in the cooking process and a
43 reliance on processed food while cooking. Another notable difference revealed that
44 ROI counterparts were less likely to cook a separate meal for their children than NI
45 counterparts further suggesting that the role of family involvement in cooking is vital
46 for improving a child's willingness to try or eat the same meal as other family
47 members. These results are similar to those described in Beck (2007). More recently,
48 one study demonstrated that by involving children in cooking activities and meal
49 preparation their willingness to taste novel foods increased (Alloiret et al, 2016).
50 Therefore, the findings from our study may contribute to understanding the need to
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3 involve family members, specifically children, in the domestic cooking process.
4 These associated cooking practices highlight an opportunity to develop cooking
5 interventions which involve more than one family member as this might have a
6 positive effect on the types of meals prepared and foods used while cooking. A study
7 by Chu et al. (2014) of 10 – 12 year boys found that those children with a higher level
8 of food involvement in the home were associated with a higher fruit and vegetable
9 intake and better diet quality. Therefore, the sharing of cooking responsibility within a
10 household may not only promote social cohesion within the family but have positive
11 implications on dietary quality.
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20 **Conclusions**

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

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58 ***See additional pages for figures and tables***
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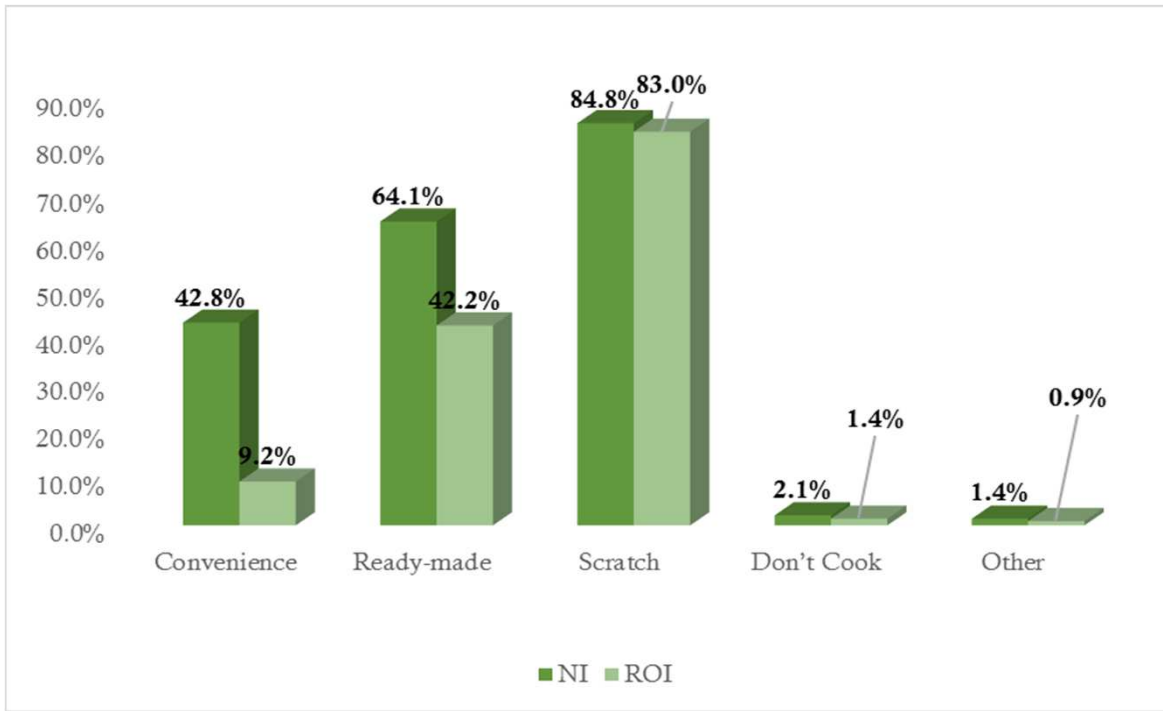
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	Always (%)		Often
	NI	ROI	NI
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	n (%)		Sometimes (%)		Rarely (%)		Never (%)	
	ROI	NI	ROI	NI	ROI	NI	ROI	
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4	36	27	7	6	2	1	0	
5	56	29	24	6	5	2	1	
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	
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	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

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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

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

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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 centpercent) 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 centpercent) 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.

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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

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3 disease, type two diabetes and certain cancers in adulthood. The eating habits of
4 children on the IOI are also less than desirable. Currently, many children are not
5 meeting the current dietary recommendations of five plus servings of fruit and
6 vegetable daily. ~~Children's p~~Portion sizes have increased over the last number of
7 years with saturated fat and sugar consumption both over recommended levels.
8 ~~Indeed~~Indeed, one fifth of children's dietary energy intake comes from sugar
9 sweetened beverages, chocolate and confectionary (Safefood, 2016).
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16 International research suggests that family meals may have an important role to play
17 in preventing obesity and establishing healthy food practices (Berge et al., 2012; Chan
18 and Sobal, 2011; McIntosh et al., 2009). Woodruff and Kirby (2013) purport that an
19 effective public health strategy to promote healthy food behaviours should involve
20 encouraging frequent healthy family meals. Due to the negative health implications of
21 childhood obesity and the evidence of certain less healthy eating habits there is an
22 increased impetus on the adoption of a healthy lifestyle on the island. Consequently,
23 the role of parental cooking skills and their impact on family meals requires further
24 investigation.
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33 Family meals can have a positive impact on nutrition and dietary intake with reports
34 suggesting that adolescents who have frequent family meals have higher self-efficacy
35 for healthy eating, consume more fruit and vegetables and less soft drinks (Fruh et al.,
36 2011; Neumark-Sztainer et al., 2010). Studies have shown a positive correlation
37 between family meal frequency and healthy child and adolescent body mass index
38 (BMI) (Berge et al., 2012; Anderson and Whitaker, 2010). It is also argued that an
39 ability to cook has an impact on an individual's competency to exercise control over
40 their diet and make informed decisions with regard to food choices (Caraher et al,
41 1999; Lang & Caraher, 2001). Szabo (2011) urges families and individuals to re-
42 connect and re-engage with food by cooking from scratch and consequently move
43 away from the consumption of convenience foods. Whilst Lichtenstein and Ludwig
44 (2010) are emphatic in the fact that children who are not exposed to cooking and feel
45 uncomfortable in the kitchen will be at a disadvantage for their entire life.
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3 Schools have been identified as playing an important role in the early development of
4 food and cooking skills (McCloat and Caraher, 2016; Caraher et al., 2013).
5 International research suggests that family meals may have an important role to play
6 in preventing obesity and establishing healthy food practices (Berge et al., 2012; Chan
7 and Sobal, 2011; McIntosh et al., 2009). Woodruff and Kirby (2013) purport that an
8 effective public health strategy to promote healthy food behaviours should involve
9 encouraging frequent healthy family meals. In the ROI Home Economics is an
10 established, but optional, secondary school subject on the curriculum. At junior level
11 (11-15 year olds) the subject aims to develop students' knowledge and practical skills
12 of food including nutritional knowledge, shopping, menu planning, food budgeting,
13 food safety and hygiene, food labels, practical cookery skills etc. (Department of
14 Education, 1990). In NI Home Economics is part of the minimum requirement for
15 every student at Key Stage 3 (11-15 year olds). This curriculum aims to develop
16 students' knowledge and practical skills in the choice, preparation, storage cooking
17 and serving of food (CCEA, 2016). Lichtenstein and Ludwig (2010) state that the
18 school curriculum needs to provide adolescents with the practical skills required to
19 become confident in the selection, handling and preparation of natural food
20 ingredients. They believe that by having home economics on the curriculum young
21 people will have the necessary skills to lead long and healthy lives. This is further
22 reiterated by McCloat and Caraher (2016) who identified Home Economics education
23 as a food education intervention required to address the societal and (ill)health
24 changes which are occurring at a population level.
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47 ability to cook has an impact on an individual's competency to exercise control over
48 their diet and make informed decisions with regard to food choices (Caraher et al.,
49 1999; Lang & Caraher, 2001). Szabo (2011) urges families and individuals to re-
50 connect and re-engage with food by cooking from scratch and consequently move
51 away from the consumption of convenience foods. Whilst Lichtenstein and Ludwig
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~~(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 prerequisites. 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.,

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3 2015; Caraher, 2013; Lang & Caraher, 2001; Caraher & Lang, 1999); others refer to it
4 as a 'transition' or a change in cooking and food preparation behaviours and a move
5 away 'from scratch' cooking (Caraher & Lang, 1999, Government of Canada, 2010).
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7 Dougherty and Silver (2007) maintain that cooking 'from scratch' skills are being lost
8 among children and adolescents particularly as families utilise prepared meals and
9 convenience foods. By not involving children in food preparation at meal times,
10 Soliah, Walter and Jones (2012) argue that children are less likely to have an
11 opportunity to develop cooking skills at home.
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18 To date little is known on the role parents play in the provision and type of meals in
19 the home setting and their implications on health. In addition, there is limited research
20 on understanding the food preparation and cooking skills of parents particularly on the
21 IOI. The purpose of this paper it to examine the self-reported food skills, cooking
22 confidence and practices amongst a sample of parents on the IOI
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30 **Methods**

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

43 A pilot was conducted with 10 parents in NI and ROI. Following some amendments
44 to the survey, data collection took place in the spring of 2014. A total of 363 parents
45 on the IOI took part in the survey (218 from the ROI and 145 from NI). Participants
46 were obtained from a convenience sample located near each university campus (Sligo
47 and Coleraine). They were recruited via local schools, email utilising the University
48 and College email databases, social media, community outlets and centres, Family
49 Resource AHCentres, family and friends, community family events. All participants
50 were parents (n=363) and overall 90 ~~per~~cent of respondents declared
51 responsibility for either the 'majority' or 'all' of the cooking in the household, 91 ~~per~~
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3 | ~~percent~~ were female and 9 ~~per-cent~~ male. All participants had to be over
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12 | 18 years old to complete the survey.

10 **The Questionnaire**

11 | Based on ~~the published studies and the literature, literature, an original~~ -survey was
12 developed which included measures on parents perceived cooking skills and cooking
13 behaviours. Participants *feelings towards cooking* were measured using items relating
14 to cooking enjoyment (rated on a 5-point scale from strongly agree to strongly
15 disagree) and questions relating to attitudes towards cooking (one closed-ended
16 question with a one-choice answer option including “enjoyable” or “chore” and an
17 open ended option for participant to explain the answer). Measures relating to *family*
18 *members involvement in cooking* included one closed-ended question with a one-
19 choice answer option including “yes” or “no” and an open ended option for
20 participant to explain the answer. Questions on the type of preparation (one closed-
21 ended question with 5 one-answer options) were included in order to measure cooking
22 styles, frequency of scratch cooking (rated on a 5-point scale from daily to never) and
23 cooking confidence (rated on a 7-point scale from extremely confident to not at all
24 confident). Measures relating to the *learning of cooking skills* included one question
25 where participants gained their basic cooking skills (one closed-ended question with
26 10 one-answer options). *Cooking skills* measures included items relating to specific
27 cooking behaviours (e.g. I cook a separate meal for my children, I bake fresh bread
28 from scratch etc.) were rated on a 5-point frequency scale from always to never).
29 *Eating habits* measures included participant consumption of fruit, vegetables,
30 pasta/rice, potatoes and fish (rated on an 8-point frequency scale from never to 3
31 times a day or more). Nutrition knowledge was measured by asking participants to
32 identify how many portions of fruit and vegetables certain product items contain (e.g.
33 one small raspberry yoghurt (rated on 4-point scale from 0 to 3 and “Don’t know”).
34 Measures relating to the *cooking behaviours* (e.g. I cook a separate meal for my
35 children, I bake fresh bread from scratch etc) were rated on a 6-point frequency scale
36 from 1 equalling always to 5 equalling never and 6 equalling don’t know). Qualitative
37 data obtained from open ended questions. Demographics (e.g. country of residence,
38 household size, gender and socio-economic status) were also obtained.
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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

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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.

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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~~ ($x^2=56.167$, $df=1$, $p<.001$) 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 ($x^2=16.767$, $df=1$, $p<.001$) 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

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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

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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*"

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3 for reasons not to permit family member involvement. Results also showed that
4 parents from the ROI (58 ~~per-cent~~percent) were less likely to make separate meals for
5 their children compared to parents in NI (31 ~~per-cent~~percent).
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10 11 12 13 **Discussion**

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16 To the best of our knowledge, the present study is the first one that examines food
17 skills, cooking confidence and practices amongst parents on the IOI identifying
18 jurisdictional differences between Northern Ireland and the Republic of Ireland.
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23 The findings suggest that the majority of participants enjoyed cooking meals from
24 scratch with few parents viewing it as a chore. The results from this study provide
25 empirical evidence of the link between cooking enjoyment and the likelihood to cook
26 from scratch using fresh ingredients. Parents from ROI ate significantly less
27 convenience foods and complete meals using readymade ingredients (such as jarred
28 sauces) when compared to NI parents. Parents from NI cooked from scratch
29 ingredients significantly less often than ROI parents. Parents who thought cooking
30 was a chore cooked from scratch less often than those that enjoyed cooking. The
31 reliance of NI counterparts on convenience foods and readymade ingredients indicates
32 a possible paradigm shift in cooking perceptions as meal assembly and reheating
33 prepared foods has become an acceptable cooking practice. Lichtenstein and Ludwig
34 (2010) highlight that due to parental reliance on take away food, frozen meals and
35 prepared package foods, many children seldom get the opportunity to taste a home
36 cooked meal much less be exposed to the ingredients that go into making one. They
37 also believe that having home economics as a mandatory part of the school
38 curriculum would transform meal preparation from a daunting chore into a
39 manageable and fulfilling activity.
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53 This study confirmed that time was the main barrier to cooking from scratch using
54 fresh ingredients. Other results showed cooking confidence, lack of prioritisation,
55 limited cooking skills and knowledge, and cost as barriers to cooking from scratch. A
56 study by Beck (2007) found that most evening meals included processed commercial
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3 food (e.g. ready to eat or convenience food) in at least moderate amounts, with the use
4 of these foods saving approximately 12 minutes of hands on cooking time. Similarly,
5 Lavelle et al, (2016) highlighted barriers to scratch cooking including time pressures;
6 saving money; desire for effortless meals; family food preferences and effect of
7 kitchen disasters.
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13 The results in this study have also shown that cooking confidence has an impact on
14 meal preparation. McGowan et al, (2015) identified low self-confidence in cooking as
15 a barrier to healthy food choices. Lavelle et al (2016) noted that a key facilitator to
16 cooking from scratch was self-efficacy and confidence in one's cooking ability.
17 Furthermore, in a study by Beshara, Hutchinson and Wilson (2010), mothers who
18 were less confident in cooking a healthy meal were more likely to prioritise the use of
19 convenience foods instead of preparing a healthy meal for the family. The results
20 demonstrate that the majority of parents had learned their basic cookery skills from
21 their mother or from established cookery lessons in the school environment, such as
22 Home Economics or Food Technology classes. In contrast new skills were learned
23 independently such as through cookery books and cookery programmes. These
24 findings are consistent with the literature to date and highlight the key role parents,
25 more specifically mothers, play in preparing meals for the family and developing food
26 and cooking skills within the domestic setting (Van der Host, Ferrage and Rytz,
27 2014). The importance of Home Economics on the national curriculum in both
28 jurisdictions must also be acknowledged. Lichtenstein and Ludwig (2010) state that
29 home economics in schools is crucial to ensuring that both boys and girls have the
30 basic principles of food preparation they need to feed themselves and their families
31 within the current food environment. Indeed, they call it a "version of hunting and
32 gathering" for the 21st century and they believe that home economics education must
33 be part of the long term solution in tackling childhood obesity.
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50 This study reported a number of statistically significant differences across the two
51 jurisdictions (ROI and NI), however, one of the most interesting results highlighted a
52 reticence among NI parents to involve family members in the cooking process and a
53 reliance on processed food while cooking. Another notable difference revealed that
54 ROI counterparts were less likely to cook a separate meal for their children than NI
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3 counterparts further suggesting that the role of family involvement in cooking is vital
4 for improving a child's willingness to try or eat the same meal as other family
5 members. These results are similar to those described in Beck (2007). More recently,
6 one study demonstrated that by involving children in cooking activities and meal
7 preparation their willingness to taste novel foods increased (Alloiro et al, 2016).
8 Therefore, the findings from our study may contribute to understanding the need to
9 involve family members, specifically children, in the domestic cooking process.
10 These associated cooking practices highlight an opportunity to develop cooking
11 interventions which involve more than one family member as this might have a
12 positive effect on the types of meals prepared and foods used while cooking. A study
13 by Chu et al. (2014) of 10 – 12 year boys found that those children with a higher level
14 of food involvement in the home were associated with a higher fruit and vegetable
15 intake and better diet quality. Therefore, the sharing of cooking responsibility within a
16 household may not only promote social cohesion within the family but have positive
17 implications on dietary quality.
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30 **Conclusions**

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

See additional pages for figures and tables

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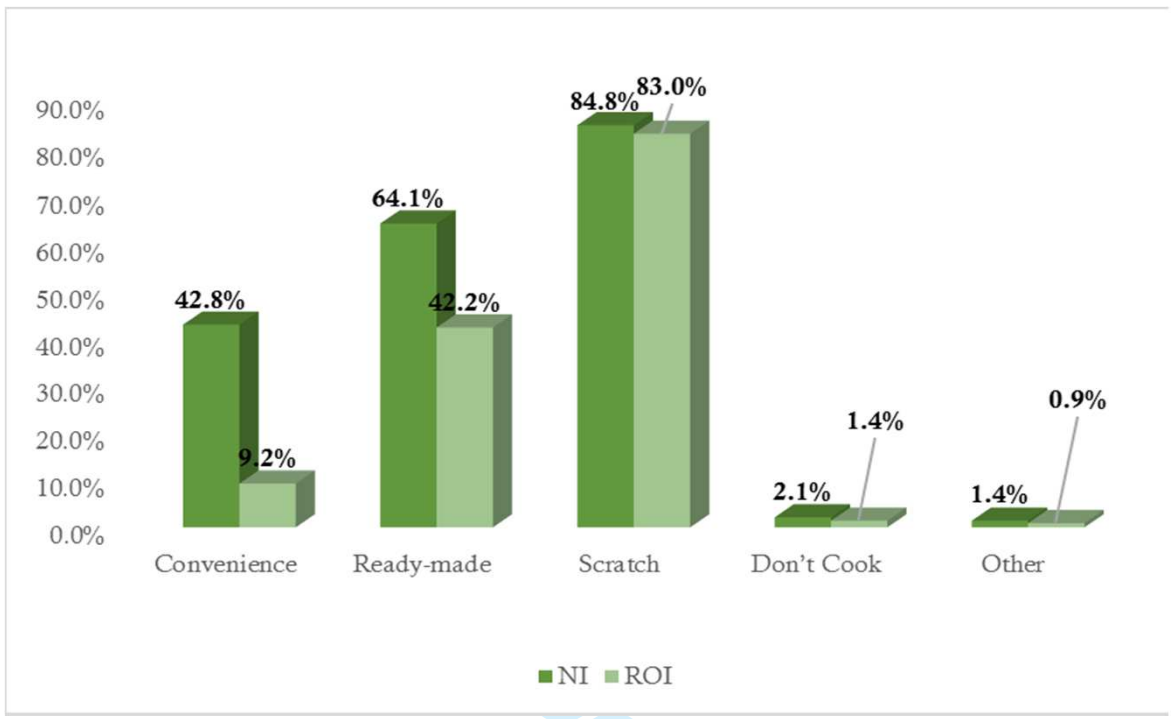
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	Always (%)		Often
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n (%)	Sometimes (%)		Rarely (%)		Never (%)	
	ROI	NI	ROI	NI	ROI	NI
36	27	7	6	2	1	0
56	29	24	6	5	2	1
48	35	26	15	5	12	2
49	40	34	4	6	2	3
24	30	43	27	21	21	7
12	37	43	9	35	1	10
36	42	36	23	17	9	8
20	41	42	23	25	6	12
35	37	32	6	4	13	2
18	20	20	14	24	13	24
10	20	32	20	24	40	28
11	11	24	16	24	67	31
8	38	32	28	38	19	20
6	42	20	28	30	26	44
30	33	23	16	14	10	9
58	24	6	4	2	0	1
28	20	11	7	5	4	3
12	16	6	9	1	5	8

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Eating Habits

Never (%)

How often do you eat ...

NI	ROI
2	1
0	1
2	1
1	1
2	5
16	8

- Fruit
- Vegetables & Salad (excluding potatoes)
- Pasta & Rice
- Baked, Boiled or Mashed Potatoes
- Chips, Fried or Roast Potatoes
- Fish or Fish Products

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	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

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	mes week (%)		once a day (%)		Twice a day (%)		Three times or more a day (%)	
	ROI	NI	ROI	NI	ROI	NI	ROI	
4	14	15	20	15	19	8	12	
5	28	24	55					
7	5	1	1					
8	27	3	11					
9	1	1	1					
11	2	1	1					

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