Research Brief

Knowledge of Food Production Methods Informs Attitudes toward Food but Not Food Choice in Adults Residing in Socioeconomically Deprived Rural Areas within the United Kingdom

Maria Barton, PhD¹; John Kearney, PhD²; Barbara J. Stewart-Knox, PhD¹

ABSTRACT

Objective: Understand food choice, from the perspective of people residing in socioeconomically deprived rural neighborhoods.

Methods: Focus groups (n = 7) were undertaken within a community setting involving 42 adults (2 males and 40 females) recruited through voluntary action groups. Data were recorded, transcribed verbatim, and content analyzed.

Results: Attitudes to food and health were influenced by knowledge of food production and processing. Healthful foods were considered those which were fresh and unprocessed, and taste was taken as an indicator of how the food had been produced. Despite negative views of food production, processed foods were consumed. Explanations for this tension between what people wanted to eat (unprocessed food) and what they actually chose to eat (processed food) were attributed to lifestyle compression.

Conclusions and Implications: Dietary health promotion initiatives targeted at deprived rural dwellers should consider perceived issues regarding food production and processing that may influence views on food.

Key Words: food choice, food processing, attitudes, poverty, focus group (J Nutr Educ Behav. 2011;43: 374-378.)

INTRODUCTION

Despite an abundance of evidence to indicate that people living under socioeconomically disadvantaged conditions are more likely to have a less healthful diet,¹,² the reasons for this deficit are not clearly understood. Recent qualitative studies of those living in deprived circumstances have suggested that, apart from cost, lack of time is perceived as a main barrier to preparing fresh food.³,⁴ Another explanation provided for unhealthful eating practices among those living in socioeconomically deprived areas is that such neighborhoods are “food deserts,” or unsupportive food environments within which residents experience difficulty in accessing healthful food. This situation can lead to “food insecurity,” which is a lack of access to safe and nutritious food and considered both an antecedent and a consequence of poor health status.⁶-⁸ Research carried out mostly in the United States has suggested that rural dwellers in particular may experience food insecurity.⁹,¹⁰

Much research investigating diet and health inequality has tended to focus on urban communities.⁴,¹¹,¹² This research meets a need for qualitative research directed toward understanding the reasons underpinning apparent health inequality related to socioeconomic deprivation in rural communities.¹³ The aim of this study was to explore, via qualitative methods, perceived factors determining food choice and barriers to healthful eating in adults residing in socioeconomically disadvantaged rural areas within the United Kingdom.

METHODS

Sampling

Socioeconomically deprived areas were identified by the Northern Ireland Multiple Deprivation Measure (NI MDM). The NI MDM provides a ranking of Super Output Areas, which takes into account spatial or small area (average population of 1,800) deprivation. These rankings can be useful in targeting health-related intervention projects.¹⁴ There are 890 such areas in Northern Ireland. The northern area, County Antrim, where the research took place, is ranked second of 5 levels of deprivation. Although there is no universally agreed definition of “rurality,” a locality can be considered urban or...
rural on the basis of multiple factors, including population size and density; service provision; and demographic, cultural, historical and/or geographic profile.\textsuperscript{14,15} Applying these criteria, County Antrim could be considered as well provided with social and commercial services as more urban areas. For the purpose of this research, however, the study area was considered “rural,” as it includes small, relatively sparsely populated communities with strong historical and cultural links to farming and with a large proportion of land therein devoted to farming.

Contact was made initially with coordinators of voluntary community action groups based in the selected study locality, who then requested participation directly of individuals among the residents’ groups. No incentive was offered for participation. A number of those invited (about 5) declined to participate for reasons not declared to the researchers. Equating to 80% compliance, 42 adults (2 males and 40 females) from 18-74 years old (mean 48.5) took part in the discussions. Of these participants, 13% were in some form of employment, and 45% had left school at the age of 16 with no formal academic or vocational qualifications. The majority were unable or unwilling (possibly owing to employment in the “black economy”) to give an approximate figure of their weekly income.

To prompt a range of opinion, focus groups were mixed and were defined as: (1) Mother and Toddler group (n = 6); (2) Focus on Family group (n = 6); (3 & 4) Resident’s Association (n = 6; 7); (5) Cooking Skills class (n = 5); and (6 & 7) other community center attendees (n = 5; 7). The Focus on Family Project offers services such as child care facilities, complementary therapies, parenting, and skill-based courses. The Mother and Toddler and the Cooking Skills groups were affiliated with the Focus on Family initiative. The Focus on Family and the Mother and Toddler groups were composed of mothers. Of the 7 groups, 5 (focus groups 1, 2, 5, 6, and 7) were composed entirely of females. The Residents groups (focus groups 3 and 4) each contained 1 male.

**Procedure**

Ethical approval was granted by the University of Ulster Ethical Committee. Prior to each focus group session, volunteers read and signed an information and consent form. A questionnaire was administered to collect demographic and anthropometric information. Refreshments were not offered during the focus group session, so as not to bias discussion, but were provided afterwards. The focus groups were facilitated by the first author (MB) in a quiet area of the host community center. The sessions, which lasted approximately 45 minutes, were audiotaped. To guide discussion, provisional topics included: perceptions of health; dietary habits; factors determining food choice; food labeling; and barriers to healthful eating. When all topics had reached saturation, discussion was drawn to a close.

**Data Analysis**

Discussions were transcribed verbatim using a dictaphone. The data were then analyzed according to grounded theory principles. Grounded theory is a methodology for developing theory that provides a specific set of steps to follow in gathering and analyzing qualitative data.\textsuperscript{16} A grounded theory approach requires constant comparison between individuals, groups, and concepts for themes. Accordingly, the authors read and reread the transcripts so that they could become familiar with and immersed in the data. The data were analyzed inductively by the authors (MB and BSK), who agreed on common themes and any interrelationships therein. The Qualitative Research Solutions and Research Non-Numerical Unstructured Data Indexing Search and Theorizing software package (version N6, QSR International, Victoria, Australia, 2003) was used to store the data. Indented quotes illustrating themes that arose spontaneously (without prompting) out of the discussions are presented in the following section. “Fg” denotes focus group, and the number refers to the session.

**RESULTS**

**Perspectives on Healthful Eating**

When asked about healthful eating, discussion referred not to dietary recommendations, but to food provided during childhood, “traditional” meals such as soups and stews containing fresh vegetables and meat: “The older generation always made sure there were vegetables” (fg1); “Every day there was meat or some sort of stew and cabbage, carrots, or parsnips” (fg6); “You just eat the food you were brought up with” (fg7). Reflecting upon early experiences with food, healthful food was perceived to be “fresh food,” particularly that which contains fruit and vegetables: “So fresh food, although it does cost more, is better” (fg2); “Fruit and veg” (fg3). Taste was regarded as an indicator of the degree to which food had been processed: “If it tastes good, it hasn’t been reconstituted” (fg2); “We always get the meat from the butchers because it tastes nicer” (fg4). Meat purchased from the local butcher was regarded as better quality (less processed by virtue of being unpackaged) and less expensive than that available in the supermarket:

- I get my meat out of the butchers and cook that way. The stuff in the supermarket is packed funny and doesn’t look as good. It goes off very quickly too. It’s better value in the butcher’s too (fg1);
- “When you get it (meat) in the supermarket it costs about 4 pound. But if you go to the butchers it costs 2 pound” (fg3). Chicken production and processing was one of the main industries in the area in which participants resided. Perspectives reflected experiences and knowledge of poultry processing:

  - You know the way you get that old minced chicken . . . It’s the left-over chicken that goes into chicken burgers and chicken fingers (fg3);
  - “They pump the chicken breasts up with water; I do that as a job. The more expensive have less water” (fg4).

**Barriers to Healthful Eating**

Barriers to “healthful” (fresh) food choice included the lack of flavor, particularly the blandness of fresh fruit and vegetables, the taste of which was perceived to have changed: “If you buy a turnip there’s no taste of it now” (fg3); “Food’s very bland now.
. . . today I can’t find a good potato” (fg4). Lack of flavor was attributed to out of season production and processes:

When I was growing up there was a lovely taste of cabbage, now there is nothing, I can’t even eat a savoy (cabbage) now . . . it must be the stuff they put in it when they are growing it (fg3); “You can get strawberries at any time of year when they’re not in season, but they’re tasteless” (fg4). Knowledge of food production methods appeared to direct what information was derived from food labels: “I would always make sure it said 100% chicken, especially when I’m giving it to the wean (child)” (fg3); “It says on the back (of the label) that it’s shaped and that. It’s called reconstituted stuff and is about 20% chicken” (fg4). Producers were perceived to use nutritional labeling information to ‘con’ the public, particularly to make products appear more healthful than they are: “The like of those fruit shots, there’s only 6% real fruit in it” (fg7). And their children:

And there’s another thing. Not every child gets the chance to eat (school lunches). By the time they get in and they queue and then go out to play. They get less time to play. They just throw you out the door before you’re finished. So even if they did want to eat the crap on their plate, they can’t, ‘cause they haven’t the time (fg2);

“Like kids have got youth clubs and that to go to. It’s the time element. It all depends on how much time you have” (fg4). Explanations of un-healthful eating went beyond knowledge of food and health and time and economic constraints. Lack of psychological well-being was a perceived barrier to healthful eating:

If somebody hasn’t enough money they go into depression, and what’s the first thing you do if you’re down, eat. And you eat all the wrong stuff, and the next thing you put on weight (fg3);

People get into a vicious circle where they’re not working and they’re not having any outside activity so they become depressed. Through that depression they can... start smoking and drinking, going to bingo and that then has an impact on the money that they have to spend on food (fg4).

DISCUSSION

Perceptions of food and health appeared profoundly slanted by knowledge and understanding of the food-processing industry, reflecting a local economy largely devoted to farming and where food has immense cultural significance. Food-processing techniques were referred to spontaneously and recurred as a theme throughout discussion of other topics associated with food and health. Packaging labels, for example, were read to determine how the food had been processed. Even how the food tasted was perceived to reflect the degree to which the food had been processed. This finding fits with a model of food choice that holds that attitudes and other psychological factors toward food and health are linked to the physical environment in which the person resides. Previous research conducted in the United States has suggested that those dwelling in socioeconomically deprived conditions, especially within rural areas, can experience difficulty in accessing healthful food. Previous research in the present study made no mention of access to food, suggesting that this was not perceived as a barrier to healthful eating. This finding agrees with previous findings, which have suggested that access to food is seldom a problem for the disadvantaged in the United Kingdom.

Previous research has suggested that people think of food choice in terms of strategies or schemata. The dominant food choice schema among the participants in this study appeared to be to choose fresh, not processed food, yet, according to the participants, it was not one that determined which food items were chosen for consumption. Perhaps the most novel finding of this research, therefore, was the apparent tension between the expressed concept that healthful food is fresh, unprocessed food and the perceived inability to choose such food. Perceived lack of time to prepare meals dominated discussion. The lack of time that drives
use of convenient, usually processed food, however, is not peculiar to disadvantaged groups. The present data go further in suggesting that the problem was not one of lack of time per se, but rather of how time was used. Healthful eating was considered less of a priority than work and other family needs, particularly children’s activities (youth club), and food preparation was cut back to free up time for leisure. As previously found among those living in deprived areas, there was the notion that fast and convenient food was less costly than preparing a meal from scratch. Other qualitative studies that have observed an apparent contradiction between knowledge and behavior have suggested that individuals from socio-economically disadvantaged groups make “tradeoffs” between perceived product quality and price and convenience in making food choices such that more time spent on family and work roles meant less effort was put into making healthful food choices. The finding that eating practices were associated with psychological well-being also agrees with previous qualitative studies of deprived groups, suggesting that eating is perceived to be emotionally driven. Together, these data imply that food, leisure, and psychological well-being are intrinsically linked in the minds of these participants.

Choice of socioeconomic indicator is likely to be important for the selection of appropriate informants for the study of food and health issues. Although different indicators of socio-economic status are important in their own right, they are not necessarily interchangeable. A strength of this research, therefore, was that socioeconomically deprived areas were identified using multiple indicators of deprivation that included factors related to “rurality,” suggesting that the appropriate population study group was targeted and that one can have confidence in these data. A limitation of any focus group discussion, however, is that of group consensus. The likelihood of such consensus may have been increased by the fact that those who took part in the present study may have known each other and that the groups were predominantly female. Another possible limitation of the study was that it was not possible to ascertain whether those who refused to take part in the study differed in any way from those who agreed. Controlling for such bias, however, can be considered less important than ensuring the high quality and depth of the information provided. The rich data suggest an imperative for future quantitative research that takes “rurality” into account when attempting to understand health-related behavior.

IMPLICATIONS FOR RESEARCH AND PRACTICE

This enquiry has been novel in providing an in-depth understanding of the complex issues relating to food choice in those who live in socio-economically deprived rural communities in Northern Ireland and who may have dietary health promotion needs that are different from those residing in urban deprived areas. Health promotion efforts should attempt to address the complex interplay between contextual/environmental, social, experiential, and psychological factors determining food choice. Of concern is the finding that eating competes with and has come to be perceived as less of a priority than other leisure activities. That food, leisure, and psychological well-being appear conceptually linked suggests a need to research ways of portraying healthful eating as fun. Meanwhile, there is an apparent need for low-cost, convenient, clearly labeled, fresh food products among disadvantaged rural dwellers in Northern Ireland.

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REFERENCES


