ORIGINAL ARTICLE

Changing Family Food and Eating Practices: The Family Food Decision-Making System

Ardyth M. H. Gillespie, Ph.D. • Wendy L. Johnson-Askew, Ph.D., M.P.H., R.D.

© The Society of Behavioral Medicine 2009

Abstract

Background Food decision-making processes interact with family and community environments to shape families' thinking (i.e., their constructed reality) about food, eating, health, and well-being as discussed by Gillespie and Gillespie (J Fam Consum Sci 99(2):22–28 2007).

Purpose To understand the processes and impetuses for changing family food and eating routines and policies and to develop a framework for the family food decision-making system (FFDS).

Methods Interviews and observations with parents and change agents were used to generate grounded theory in the form of propositions which provided the basis for the FFDS framework.

Results The propositions elucidate the processes of and influences on family food decision-making systems. The framework illustrates the family food decision-making system and processes of changing family food and eating routines and policies.

Conclusion The FDMS framework begins to address the complexity of food decision-making to guide intervention planning and further research.

Keywords Food decision-making · Family · Changing food practices · Behavior change

A. M. H. Gillespie (⋈) Cornell University, Ithaca, NY, USA e-mail: ahg2@cornell.edu

e-mail: ahg2@cornell.edu

W. L. Johnson-Askew Public Health Nutrition/Health Policy Advisor NIH/Division of Nutrition Research Coordination, 6707 Democracy Blvd. 2 Democracy Plaza, Room 635 Bethesda, MD 20892, USA

Published online: 03 November 2009

Introduction and Background

Food decision-making processes, including acquisition, transformation, service, consumption, and disposal, interact with family and community environments to define food choices and shape families' thinking (i.e., their constructed reality) about food, eating, health, and well-being [1]. Most people's food and eating decisions are embedded in family food and eating subsystems and/or intimately connected to significant others. The purpose of this research, which draws from a series of studies, was to understand the processes and impetuses for changing family food and eating routines and policies. This paper describes the methodology used to generate grounded theory about the family food decision-making system (propositions) and the family food decision-making system (FDMS) framework. The framework is described, critical decision points are identified, and lever points within the framework that are potentially ripe for intervention are highlighted.

Methodology

Interviews and observations with parents and change agents were used to generate grounded theory and develop the framework. The following presuppositions, influenced by the symbolic interaction tradition [2], guided the nature of research questions, methods employed, and interpretation and application of findings [3].

Presupposition I

As members of society, people jointly construct a shared understanding of "reality" (social constructionism). They use their senses selectively to organize and interpret many



ambiguous stimuli from their complex world and shape these stimuli into everyday-life theories. Understanding these theories, grounded in a shared reality, from the family's perspective will provide a basis for transforming these realities to improve eating patterns, health and well-being.

Presupposition II

People actively interact with their environment in making decisions based on their understanding of reality (agency and free will). These decisions have their own inherent logic which may not be easily understood out of context.

Presupposition III

Systems continuously change with or without purposive intervention (systems change). People shape these systems to align with their perceptions of reality, reflect their values, and move toward their perceptions of health and well-being.

Interviews and Observations

Ethnographic interviews were conducted with parents of school-aged children who exhibited diverse lifestyles, ethnicities, community contexts, and socioeconomic statuses. The families included two-parent families with one or both employed, single parent families with working and nonworking parents (mostly mothers), and grandparents raising their grandchildren. Some families lived in agrarian-based communities and others in inner city or suburban communities. In all, five sets of parents (each set was comprised of 20–40 families) living in different contexts were interviewed over a period of 15 years. Families were interviewed until no new information was disclosed.

Individual interviews were also conducted with change agents who worked with families to solicit their perspectives on family food decision-making in the environments in which they worked. Interview guides were developed for each set of interviews based on the research questions, findings from previous studies, and our understanding of the interviewees. These guides were adapted as the interview and observation questions progressed to focus on emerging themes and hypotheses for further study [3]. Families were observed during home interviews and education programs to validate the interview findings.

Data Analysis

Data analysis, a continuous process within each set of interviews, consisted of three stages: (1) early analysis with primary focus on individual interviews, (2) middle analysis, with primary focus on comparing and contrasting across

interviews, and (3) late analysis, with primary focus on systematically testing theory developed in the earlier stages of the analysis. After the completion of analyses for each study, the findings were combined to develop the propositions reported below. See Gillespie and Gillespie [3] for more details on the data collection and analysis processes. The propositions were compared to other theories about decision making and behavior change.

Results

Family Food Decision-Making Propositions

These seven propositions, based on interviews with families, elucidate the processes of and influences on family food decision-making systems.

 The family food decision-making system encompasses interactions among family members as well as their individual predispositions.

An array of simultaneous food activities, including acquisition, transformation, service, consumption and disposal, and related dynamics form the family food decision-making system: (1) choosing from the foods practically available, (2) negotiating limits on family resources and trade-offs among competing family priorities, (3) deciding where to acquire particular foods, (4) mobilizing family food resources, (5) creating eating contexts, and (6) enacting family members' food and eating roles and responsibilities. The family food decision-making system is formed by the dynamic interaction among family members' individual decision-making systems and the balance of power among them.

Most food and eating decisions are routine and/or based on habitual behaviors and evolve over time.

Food routines constitute most of the day-to-day food decisions. These routines evolve over time, through family experience and communication, and in response to a changing set of contexts. For example, one mother on food stamps described her routine for food acquisition as follows:

Well, like, when I go grocery shopping I always have, like, thirty dollars for things that I have to use cash for. And then my food stamps is all on my food. And usually I know exactly what meals I'm gonna make and what I want.... Even if I don't make 'em according to the way I say I'm gonna do it, I always buy everything I need for that month.

Short-term decisions become part of the families' shared experiences with food and eating and thus, influence future



decisions. Routine food and eating practices may or may not have been established through thoughtful consideration of goals and alternative strategies for achieving them. Most family routines are some combination of cognitive, affective, and habitual inputs.

 Through family communication throughout the life course, situation-specific short-term decisions evolve into agreed-upon family food practices shaped by family food policies, roles, and interaction patterns.

Food and eating roles also evolve and are restructured through changes in life course and environment. In most families, decision-making is shared among two or more family members. We find that even members not actively engaged in the decision-making process influence it. In some instances, parents reported that family food decision-making was the mother's role, and the father ate whatever was served without complaint. However, upon further reflection about their family food decision-making system, it became apparent that the father did play a role—sometimes subtle—through verbal or nonverbal communication of his preferences and priorities.

In addition to carrying out food and eating roles, parents described socialization and nurturing roles related to food. For example, in our study revealing the meaning-creator perspective one of the mothers' self-defined roles was "helping her children develop an appreciation for the world around them." These interviewees used food to create positive, creative, and constructive family interaction.

4. Food decisions reflect families' values and often unarticulated goals and sometimes require negotiation among goals.

Family food and eating goals and other potentially competing family goals may or may not be conscious or well articulated. Goals and values were not explicitly described by many interviewees, but were implied through descriptions of family food decision-making and were related to immediate outcomes such as adhering to food preferences, encouraging pleasant family interaction during mealtime, and purchasing foods within their available financial resources. For some families, increasing financial resources for acquiring food or making efficient use of current resources was important, but this goal sometimes competed with health-related goals including weight reduction or obesity prevention, treatment of a chronic medical condition, prevention of chronic disease, and improving or maintaining the health of the children. A dynamic process of assessing alternatives often involved clarifying and prioritizing goals and/or negotiating tradeoffs among competing goals. Food and eating goals often varied among family members, and even agreed-upon family goals sometimes conflicted with each other, for example, obtaining pleasure from high-fat foods vs a desire to lose weight.

A common theme among families was the importance of family food preferences. Most often, children's and sometimes father figures' food likes and dislikes were seen as a constraint. Planning according to family members' preferences helped support the goal of family harmony at mealtime. One mother said, "We make a list of the foods we like and we go and we find the best price and that is how we do our grocery shopping."

5. Thoughtful food decisions are based on situationally specific assessments of priorities, alternatives, and available resources

Families' assessment of food and eating alternatives involved identifying possibilities and evaluating them according to the current situation and family priorities. These assessments were almost always based on incomplete knowledge or information, e.g., unawareness of a farmers' market or misinformation about the health benefits of particular foods. A possibility was not really an alternative unless it was understood by the family to be both available and reasonably accessible. Thus, practical alternatives changed over time and across situations. One set of low-income parents reported being constrained from shopping at their local upscale farmers' market even when they had food coupons because the family did not "feel comfortable" or that it was "not a place for them."

6. Family decisions are made within overlapping context.

Family food decision-making involves family members and their interpersonal dynamics as these are embedded in multifaceted and overlapping contexts [1]. Family environments are shaped by individual family members' past experiences with food, eating, and their own family, geographic context, religious affiliations, ethnic heritages, and attitudes about the importance of local and/or organically grown food. Additionally, a family unit shares its own history of interactions with and about food, health, eating, and family role structures and patterns.

Families interact with community systems that offer food, health care, education, and transportation and shape interactions with other families, policy makers, and community food decision-makers. These systems determine foods that are "practically available" to families. Food decision-making processes help families adapt their food-related activities to achieve their desired outcomes. For example, as new foods become available, families consider adding them to their food routines.



Each family member's personal subsystem of food knowledge, skills, and other human resources contributes to the family food system and at times, constrains family food decisions. These human resources are combined with individual family material resources in considering the food and eating alternatives available.

 Family food decisions change over time because of changing contexts and changes in family members and their food roles and responsibilities.

Changes in social systems (e.g., social norms related to food acceptability) and biophysical systems (e.g., availability of farmers' markets) affected families' decisions.

Interviews revealed processes of unintentional as well as intentional change. We found that initiation and maintenance of change in food and eating routines were blended over time. Thus, rather than distinct pathways of change, the findings revealed a maze of intertwining and evolving food and eating routines embedded in the family decision-making system.

The Family Food Decision-Making System: A Framework to Guide Research and Intervention Planning

Family food decision-making is interwoven with decisions about other family functions, including nurturance, socialization, and provision of other goods and services. Although it appears that most family food decisions are based on routine practices, families do intentionally reconsider these routines in response to changing contexts (Fig. 1).

Fig. 1 Family food decision-making system

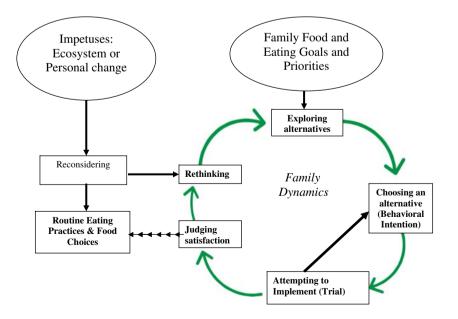
Impetuses for Reconsidering and Rethinking

Impetuses for reconsidering the decisions came from dissatisfaction with current routines, changes within the family unit, and/or changes in their surrounding environment, including purposive intervention by change agents. For example, a medical diagnosis such as a heart attack or diabetes, which changed the dietary needs of one or more family members, often triggered reconsideration of family routines as illustrated by this mother's comment:

"Well, my husband just found out that he has diabetes and he's borderline, I guess. So I guess we should be watching, but my first thought when he said it was, you know, my god, this is gonna cost us a fortune, which is horrible. I should be worried about what he should be eating.

But now I'm thinking, what does this mean? Do we have to buy, you know, more expensive foods, or do we have to get certain medication that might be more expensive? And so it's something that you know, right now, it's not a huge issue, but it might become so, it is something I'm gonna have to think about."

Some other factors that precipitated reconsideration of food decision-making included exposure to new foods and/or eating situations, progression in the life course, shifting priorities among family goals, enhanced food and eating skills, and food and nutrition knowledge. Reconsideration may lead to returning to established routines or, establishing new eating habits and practices (Fig. 1). The decision to reconsider family food routines and policies is the first of three critical decision junctures identified.





Rethinking: Engaging in a Thoughtful Food Decision-Making Process

Engaging in thoughtful food decision-making process competes with other family demands on time and other human and financial resources. Thus, the level of thoughtful decision-making was influenced by the family members' available time, access to information, and collective decision-making skills.

Families sometimes rethink their food and eating goals to realign them with primary family values. Family routines often evolve along with changes in thinking about such things as socialization of children and family dynamics. Engaging in a thoughtful food decision-making process was identified as the second critical decision juncture in the food decision-making pathway. Elements of rethinking are: (1) deciding to rethink eating practices, (2) exploring, and weighing alternatives to established routines, (3) choosing an alternative (behavioral intention), (4) attempting to implement an alternative (trial), and (5) judging satisfaction (evaluation; Fig. 1).

Exploring and Weighing Alternatives to Established Routines

Identifying practically available alternatives to established routines began with considering current knowledge and awareness based on past experiences and extended to exploring the availability of new alternatives. In addition to self-directed exploration, families may also learn about additional alternatives through interaction with change agents, marketers, and educators in their macro environment, along with friends, neighbors, and others in their micro environment.

As families consider the alternatives identified, they may consciously or unconsciously rethink their values and establish priority goals or change their perspectives on certain alternatives. Alternatives and goals are also weighed according to utility, perceived feasibility, and opportunity costs. The relative weight placed on alternatives varies depending upon the resources available to decision-makers, their knowledge of these resources, their ability to access them, and whether they are able to expand alternatives by overcoming constraints.

Attempting to Implement (Trial)

Once an alternative is chosen, the next step is to test its feasibility by attempting to implement it. Implementation may be constrained by resistance from one or more family members and by constraints imposed by the ecosystem, particularly the food system. Educators whom we interviewed report that this stage is often the most difficult, and if too many constraints are encountered, family decision-

makers may move back to the previous step in the decisionmaking process to select a different alternative, reenter the thoughtful process pathway, or revert to established routines. Thus, moving from intention to implementation is the third critical decision juncture.

Educators also noted that serving unfamiliar or less favored foods involves the risk that other family members may be unwilling to eat them, resulting in wasted food resources. For low income families, the consequences of taking such risks are greater. Another risk in making changes is disrupting family harmony, which is a primary concern for some families [4]. This trial process allows families to minimize the risks and experiment with implementation strategies. Several trials may precede a firm judgment about satisfaction.

The level of satisfaction with the alternative is judged by the family members, sometimes using conflicting criteria and often requiring negotiation. While their judgments may differ, family members will be influenced by their common history and shared values. The method by which they communicate levels of satisfaction may be constrained by family policies and social norm. For example, some families tolerated "yuks" at the family table while others considered it unacceptable. One mother reported, "The golden rule around our house is that, if you don't like it, you don't have to make a public announcement about it. So there's no big 'yuks' at the table and things like that." This mother of five explained that they had instituted this rule after her older children had developed a fairly limited set of food likes. "And that's what I think has helped the younger ones to be experimental because they don't have the older ones saying, 'you don't want to eat that, it's terrible, it tastes yucky' or whatever." Parents and siblings influence satisfaction though verbal and nonverbal communication. If the father either refuses to eat or expresses his dissatisfaction with the chosen alternative, the children are less likely to be satisfied.

If the alternative is satisfactory enough to the decision-makers and those who influence them, it may be temporarily adopted and repeated. Over time, these eating practices may become part of the family's routine eating practices. When the alternative is judged to be unsatisfactory, the family may repeat the thoughtful cycle or abandon the idea of change and return to the already established routine.

Discussion and Conclusions

The family food decision-making system framework builds upon previous research in family food decisionmaking [1] and expands understanding of the decisionmaking pathways that lead to maintenance of family food and eating routines or the initiation of changes



in food choices and eating practices. The findings support the notion that systems change over time in response to changes in the environment and/or in the actors themselves. These changes may occur as the result of a natural developmental process or as planned behavior change.

Three critical decision junctures in the family food decision-making process were identified: deciding to reconsider established routines, deciding to rethink (i.e., to engage in a thoughtful decision-making process) routines and family policies in light of family values and goals, and implementing an alternative to established routines (intention). Although family dynamics were found to be at play throughout the FDMS pathways, they are particularly important at the critical decision junctures. Intrafamily dynamics and interactions with external systems are a part of the family food decision-making system.

Family food decision-making is very complex. The FDMS framework begins to address this complexity, but more research on the process of family decision-making and related family dynamics is needed. Rethinking family routines and policies and implementing desired changes often requires substantial changes in lifestyle and daily schedules and for some, additional human and financial resources. Additional

understanding of the FDMS framework is likely to lead to more relevant interventions. The lever points identified in the FDMS framework represents areas that are ripe for interventions; however, more research is needed.

Acknowledgments The Family Food Decision-making System Framework is the culmination of the work of many who have worked in and with the food decision-making Collaborative Engaged Research team including students, community-based professionals, community nutrition educators, and colleagues around the world who form the Food Decision-making Learning Community. I especially want to acknowledge the following collaborators: Kathleen Dischner, Julia Felice, Leigh Gantner, Gilbert Gillespie, David Herring, Helen Howard, Miligros Querubin, Laura Smith, and Guan-Jen Sung.

References

- Gillespie AH, Gillespie GW. Family food decision-making: An ecological systems framework. J Fam Consum Sci. 2007; 99(2): 22–28
- Manning P, Maines DR. Theory and method in symbolic interactionism. Symb Interact. 2003; 26(Special Issue): 498–675.
- 3. Gillespie AH, Gillespie GW. Generating grounded theory with community partners. *J Community Nutr.* 2006; 8(1): 16–23.
- Kirk M, Gillespie AH. Factors affecting food choices of working mothers with young families. J Nutr Educ. 1990; 22: 161–168.

