THE ILLUSION OF CHOICE: MOTHERS' PERSISTENT OPTIMIZING TO FEED THEIR PRESCHOOL CHILDREN

by

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DEDICATION PAGE

This thesis is dedicated to my Aunt Doll and Uncle Ross, without whose loving support and encouragement it would not have been possible, and to the memory of my parents, Joan and Leo Walsh, who always believed in me.

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ABSTRACT

Mothers play a vital role in providing healthy food choices for their preschool children. This role has become more complex in the present obesity-producing environment that has contributed to the increasing prevalence of childhood overweight and obesity in Canada. Childhood overweight and obesity is a significant public health issue in Nova Scotia where the percentage is higher than the national average.

The purpose of this study was to generate a theoretical understanding of the process in which 18 mothers living within the Cape Breton Regional Municipality engaged while making food choices for their preschool children. Constructivist grounded theory methodology informed by sensitising constructs from symbolic interaction and the socio-environmental health promotion perspective facilitated a multilevel exploration of the factors that affect mothers' food choice practices for their preschoolers. Data collection took place over 16 months. Thirty-five interviews were completed.

Grounded theory methods were used to analyze the data and a substantive theory of how mothers made food choices for their preschool children was co-constructed with the participants. The substantive theory, *Persistent Optimizing,* consists of three main integrated conceptual categories. In the first conceptual category, *Acknowledging Contextual Constraints,* mothers acknowledged various individual, interpersonal, and socio-environmental contextual factors that hindered their ability to make intended, healthier food choices for their children. In the second conceptual category, *Stretching Boundaries,* mothers developed and enacted moderating strategies to lessen the impact of contextual constraints, thereby increasing the number of food choices available to them. In the third conceptual category, *Strategic Positioning,* mothers developed and enacted a variety of optimizing strategies to get them closer to making the optimal food choice for their children in a given situation.

Mothers in this study struggled continuously with varying degrees of success to provide the foods they believed their children needed. The findings suggest that in practice, policy, research, and education, community health nurses must work independently and collaboratively at all levels of influence to facilitate, mediate, and advocate for social, economic, and physical environments that improve mothers' ability to make food choices that promote their children's health and reduce their risk of becoming overweight and obese.

LIST OF ABBREVIATIONS USED

APHA	American Public Health Association
BLAC	Black Learners Advisory Committee
BMI	Body Mass Index
CAPC	Community Action Programs for Children
CASW	Canadian Association of Social Workers
CBDHA	Cape Breton District Health Authority
CBRM	Cape Breton Regional Municipality
CCL	Canadian Council on Learning
CDPAC	Chronic Disease Prevention Alliance of Canada
CESP	Canadian Society for Exercise Physiology
CHNC	Community Health Nurses of Canada
CINAHL	Cumulative Index of Nursing and Allied Health
CPHA	Canadian Public Health Association
CPHI	Canadian Population Health Initiative
IALSS	International Adult Literacy Skills Survey
IOM	Institute of Medicine
LICO	Statistics Canada Low Income Cut-Off
NSOHP	Nova Scotia Office of Health Promotion
NSPHS	Nova Scotia Public Health Standards
PHAC	Public Health Agency of Canada
WHO	World Health Organization

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CHAPTER ONE: INTRODUCTION

Mothers play a vital role in providing healthy food choices for their young children. This role has become more complex in the present obesity-producing environment that in recent decades has contributed to a rapid increase in the number of Canadian children becoming overweight and obese (Canadian Population Health Initiative [CPHI], 2004).This increasing prevalence of childhood overweight and obesity is a critical public health issue in Canada (Lobstein, Baur & Uauy, 2004; Public Health Agency of Canada [PHAC], 2011). In response to this public health challenge, the aim of this constructivist grounded theory inquiry (Charmaz, 2006) was to generate a theoretical understanding of the process that mothers residing in the Cape Breton Regional Municipality (CBRM) of Nova Scotia used to make food choices for their preschool age children. This research makes an important contribution to understanding this public health issue and identifying strategies for preventative action.

In this Chapter, I describe the background of the problem, situate the research problem, briefly describe constructivist grounded theory methodology, and explain the relevance of a socio-environmental health promotion perspective to this inquiry and to the methodology used. I also discuss my personal location in the research, the purpose, and the significance of the study. I conclude the Chapter with a description of the layout of the thesis.

Background of the Problem

"Canada is in the midst of a childhood obesity epidemic" (PHAC, 2011, p.1). In recent decades, the number of children becoming overweight and obese in Canada has been on the rise (CPHI, 2004). Presently, more than one in four (26%) Canadian children

and youth are overweight; defined as a Body Mass Index (BMI) of 25 kg/m^2 using age- and sex-specific growth charts, or obese; defined as a BMI of 30 kg/m^2 using age-and sex-specific growth charts (Cole, Bellizzi, Flegal & Dietz, 2000; Statistics Canada, 2004).

Children who begin school as overweight or obese are at an increased risk of remaining overweight and obese into adulthood (Cole, 2004; Willms, 2004) and for developing chronic diseases during their adult years (PHAC, 2011). Compared with normal weight children, overweight and obese children suffer disproportionately from a number of chronic conditions such as type 2 diabetes, heart disease, bone and joint problems, and sleep apnea (American Public Health Association [APHA], 2005; Lobstein, et al., 2004; PHAC, 2011; Torgan, 2002). These children are more likely to be chronically ill and even to die prematurely (CPHI, 2004; Institute of Medicine [IOM], 2004). In addition, overweight and obese youth experience intense stigmatization, lower self-esteem, and increased loneliness. They report lower health related quality of life as their ability to move freely, play sports, and engage with peers is affected (APHA, 2005; IOM, 2004; Lobstein et al., 2004; Strauss, 2000).

This public health issue is of particular importance in Nova Scotia where 32% of children aged 2-17 are overweight or obese compared to the national average of 26% (Statistics Canada, 2004). Obesity-related health problems put additional strain on present and long term Canadian health care costs (Kuhle et al., 2011; PHAC, 2011). Kuhle et al. (2011) found that obese children living in Nova Scotia had significantly higher health care costs, more physician visits, and more specialist referrals than their normal weight peers.

According to the World Health Organization ([WHO], 2005), "the healthy future of society depends on the health of the children of today and their mothers, who are guardians of that future" (p.1). The gendered nature of feeding a family is well noted in the literature (Attree, 2005, 2006; Moss, 2002; Spitzer, 2005; Travers, 1996). Mothers generally determine their young children's food choices (Davidson & Birch, 2001; Lindsay, Sussner, Kim & Gortmaker, 2006; Statistics Canada, 2010). These choices play a major role in their children's growth and development and influence their overall health status. Unhealthy eating, regardless of weight gain, is a risk factor for developing many chronic diseases (Colman, 2002). Diets high in calories, cholesterol, fat and salt, and low in fibre place people at increased risk of developing heart disease, cancer, stroke, type 2 diabetes, and atherosclerosis; five of the ten leading causes of death (Colman, 2002).

A complex and interacting set of multiple social, economic, cultural, technological, and environmental factors and conditions contribute to the public health problem of childhood overweight and obesity (Eriksen, Lyn & Moore, 2010; PHAC, 2011); combined, many of these factors and conditions create an environment that is obesity-producing. An obesogenic or obesity-producing environment is defined by Swinburn, Egger, and Raza (1999) as "the sum of influences that the surroundings, opportunities or conditions of life have on promoting obesity in individuals or populations" (p.564). The obesity-producing environment is the socially constructed backdrop against which mothers are expected to make food choices that promote and protect their children's health. For individuals to make choices that promote health, they must constantly engage in often problematic processes of adapting to the physical,

material, economic, and social circumstances of their environment (Tones & Green, 2004).

Mothers face growing complexities in making food choices for their children in an ever increasing obesity-producing environment (Nova Scotia Office of Health Promotion [NSOHP], 2005). A mother's ability to make choices for herself and for her children is a function of her agency. Giddens (1984) describes agency as the capacity to act, or to independently exercise choice in a given situation; this capacity, however, is limited by structural constraints that arise through the interplay of agency and social structures. Similarly, Bandura (2002) states that individual and collective goals provide incentives and guides for action; individuals' lives are shaped by how they view and interpret the opportunities and obstacles in their environment. These views form the foundation of human agency (Bandura).

According to Palojoki and Tuomi-Grohn (2001), to understand the rationale behind human choices we must know the context and the life situation of the persons involved. Research that can inform effective obesity prevention in early childhood can significantly improve children's health by reducing the individual and the overall population prevalence of obesity (Institute of Medicine (IOM, 2004; Wofford, 2008).

Research Problem

Making food choices is a health behaviour in which humans engage on a daily basis. Although seemingly simple, as much of the work involved is not visible to others (DeVault, 1991), it is a complex social practice determined by many factors and their interactions (Furst, Connors, Bisogni, Sobal, Falk, 1996). Social practices are described by Giddens (1984) as the situated activities of social agents or individuals that occur in

the flow of everyday life or in context (Delormier, Fohlich & Potvin 2009; Giddens, 1984). Food choice practices involve interacting and negotiating with family members and with the food system to provide food for oneself or for one's family. Food choice decisions are frequent and complex in that multiple, interrelated decisions must be made during the many stages of food handling, when food is acquired, prepared, served, given away, stored, eaten, and cleaned up (Furst, et al., 1996; Sobal & Bisogni, 2009).

Despite this complexity, much of the research to date on how people make food choices has used theoretical approaches that have been founded on social-psychological theories designed to understand individual dietary behaviour. Some of these theories include Fishbein and Ajzen's (1975) theory of reasoned action (Anderson & Sheperd, 1989; Bagozzi et al., 2000; Saunders & Rahilly, 1990), Ajzen's (1988) theory of planned behaviour (Armitage & Conner, 1999; Arvola et al., 2008; Dennison & Shepherd, 1995; Olsen, Heide, Dopica,& Toften, 2008; Povey, Conner, Sparks, James, & Shepherd, 2000), Gollwitzer's (1993, 1999) implementation intentions theory (Armitage, 2004; Bamberg, 2002; Verplanken & Faes, 1999), the transtheoretical model of behaviour change (Hildebrand & Betts), and Bandura's (1986) social cognitive theory (Friese, Hoffman, & Wanke, 2008; Lubans, Plotnikoff, Morgan, Dewar, & Costigan, 2012; Reynolds, Hinton, Shewchuk, & Hickey, 1999). These theories offer valuable insights into the psychosocial characteristics of individuals such as knowledge, attitudes, and intentions in determining features of rational food choice, but fall short in integrating the significant role that complex, interacting social and environmental factors play. According to Delormier et al. (2009), the dominant use of individual level, behavioural theories to study and explain individual food choice exaggerate the role that rational

individual choice plays in what people choose to eat. In fact, they diminish the extent to which eating is a social practice, which is connected to the flow of everyday life, and how choice is conditioned by the socio-cultural context in which it occurs.

Individual level theories, which explain health practices such as making food choices, align well with biomedical and behavioural health promotion approaches that have dominated the health promotion field over the last thirty years. Sustained within a medical discourse, the biomedical approach emphasizes the prevention of illness, and the behavioural/lifestyle approach stresses the promotion of health. In both of these approaches it is an individual's behaviour or lifestyle that is considered key to enhancing one's health (Cohen, 2012; Labonte, 1993). These health promotion approaches are strongly tied to the dominant ideology of individual responsibility or individualism.

Individualism perpetuates the tendency to view the sources of health and illness as emanating from individual behaviours and actions rather than resulting from the influence of societal structures (Raphael, Curry-Stevens, & Bryant, 2007). It presumes that individuals determine their own health by the lifestyle choices they make, ignoring the influences of social and environmental circumstances on one's ability to choose (Hofrichter, 2003; Lynam, 2005). The power of the ideology of individual responsibility rests in making the set of beliefs about the individual appear plausible while obscuring relevant, but disconcerting, societal and contextual realities (Rush, 1997). Instead of examining the conditions of life and society that create health and illness, emphasis is upon individuals to control their personal behaviours and choices

Mothers who do not feel in control of their environment or their personal circumstances have greater difficulty making healthy choices for their children

(Department of Health London, 2004a). Social, economic, political, and environmental conditions can limit or damage people's agency and capacity for health (Tones & Green, 2004). Therefore, it is important to examine the role that personal circumstances and environmental structures play when exploring how mothers make food choices for their children. Individual, behavioural theories are not sufficient to explain how mothers make food choices for their preschool age children as these approaches do not adequately account for the complex and interacting socio-environmental, contextual factors and conditions that influence food choice.

Constructivist Grounded Theory Methodology

In this inquiry I used a constructivist grounded theory methodology (Charmaz, 2000, 2002, & 2006) to better understand the actions, interactions or the process in which mothers engage when making food choices for their preschool children. Constructivist grounded theory methodology is underpinned by the assumptions of symbolic interaction. It is therefore an appropriate approach to further understanding of broader social environmental conditions as well as individual and interpersonal influences on human action and interaction, particularly the meaning making and symbolizing in which individuals engage during their daily lives (Charmaz, 2006; MacDonald, 2001). Using constructivist grounded theory methodology I collected rich narrative data with thick description of pertinent details and contextual descriptions (Charmaz, 2000). The methods allowed for a systematic approach to capturing interactions of mothers with the food system, their children, and immediate as well as extended family, illuminating the mother's human agency as well as social structures or conditions that influence food choice. Understanding the construction of the process used by mothers in making

decisions about what foods they provide for their preschool children will allow evidence-based interventions at various stages of the process to contribute to improved eating practices in preschool aged children. Additionally, by using constructivist grounded theory methodology I was able to conduct the type of critical inquiry needed to explore how inequalities are played out at interactional and organizational levels (Charmaz, 2005). In this study, through repeat interviews, 18 mothers told their stories and expressed their ideas. They considered and critically discussed the role that family, society, government, and industry played in regard to the food choices they were able to make for their preschool age children. The research methodology is discussed in greater detail in Chapter Three.

Socio-environmental Health Promotion Perspective

To address the gap in the research that predominantly explores food choice from an individual perspective and diminishes related social, cultural, and environmental contextual factors, this constructivist grounded theory study exploring how mothers make food choices for their children was informed by the socio-environmental health promotion perspective (Cohen, 2012; Labonte, 1993). The multifactoral socio-environmental health promotion perspective sensitised me to explore social and interpersonal factors, as well as broader socio-environmental contextual factors that influence mothers' food choice practices. The multifactoral focus of the socio-environmental health promotion perspective provided a set of guide posts or sensitising concepts (Charmaz, 2006) consistent with my public health nursing background and beliefs. These concepts offered a starting place for examining the study phenomenon,

provided ideas to pursue, and sensitised me to ask particular questions throughout the research process.

The socio-environmental health promotion perspective was strongly influenced by the field of social ecology and the socio-ecological model that emphasizes that individual behaviour change and environmental and systems change are necessary to promote health; neither is sufficient on its own (Cohen, 2012). A socio-ecological construct of health recognizes that health is not given to people, but gene rated by them (McMurray, 2007). Health is not only influenced by individual factors such as biology or genetics but also by social and interpersonal relations, by economic, political, and cultural realities as well as by environmental conditions, and by broader social and economic trends (Cohen, 2012; Smedley & Syme, 2000). The complex interactions among these multiple factors play a significant role in creating the conditions that promote or inhibit health. Therefore, a health problem needs to be explored as a construction among people and their interactions with their environment (Green, Richard, & Potvin, 1996; Sallis & Owen, 1997). Different aspects of a health problem influence the community on a number of social levels; therefore, in describing a health problem, the problem needs to be viewed from the different levels of aggregation (Yoo et al., 2004). An advantage of the socio-ecological model is that it provides a structure that aids the researcher to think about multiple level factors and their interactions that affect how mothers make food choices for their preschool children such as: individual, interpersonal, organizational, community, and policy level factors (McLeroy, Bibeau, Steckler & Glanz, 1988).

The evolution of the socio-environmental health promotion perspective was further influenced by the Ottawa Charter on Health Promotion (WHO, 1986), which

defined health promotion as the process of enabling people to increase control over their health and to improve their health … a mediating strategy between people and their environment, synthesizing personal choice and social responsibility in health. Equity in health and an empowerment process were identified as core values of this health promotion perspective (WHO, 1986).

"Equity in health means that people's needs guide the distribution of opportunities for wellbeing … that all people have an equal opportunity to develop and maintain their *health*, through fair and just access to resources for health " (WHO,1998b, p.7). According to the WHO (1998b), inequities occur as a result of differences in opportunities, which result in consequences such as unequal access to health, adequate housing, or nutritious food. To reduce inequities in health between groups or sub groups and to maintain and improve the overall health of a population requires a population health focus, which recognizes that factors or determinants both within as well as outside the health care system, significantly affect health (PHAC, 2004).

Empowerment is described as an active, involved process whereby individuals, groups, and communities move toward increased individual and community control, political efficacy, improved quality of community life, and social justice (Community Health Nurses of Canada [CHNC], 2011b). A concept analysis of empowerment describes it as a helping process, a partnership valuing self and others, mutual decision making, and the freedom to make choices and accept accountability for actions (Rodwell, 1996). The WHO states that "... *Health promotion* not only encompasses actions directed at strengthening the basic *life skills* and capacities of individuals, but also at influencing

underlying social and economic conditions and physical environments which impact upon *health*" (WHO, 1998b, p. 6).

Choice is embedded in the empowerment process (Rodwell, 1996; WHO, 1998b). It is embedded even within the word itself. The Latin root of power, *potere,* also means the ability to choose (Rodwell, 1996). According to Kabeer (1999), power is about the ability to make choices; therefore, to be disempowered is to be denied choice. She contends that the notion of empowerment refers to a process of change by which people who have been denied the ability to make choices acquire such ability.

In relation to food choice, persons or organizations at higher political, economic, or legislative levels that have the ability to control decisions such as food availability, food pricing, and food marketing often condition and constrain the ability of people to exercise control or choice at the individual or group level (Laverack, 2004). For many people choice is an illusion as the choices they are able to make are shaped by their life chances that are embedded in particular socioeconomic, gender, age, education, and other distinctive realities (Cockerham, Rutten, & Abel, 1997; Weber, 1978). Bambas and Casas (2003) contend that the social context of a situation demonstrates how people's genuine, intended choices can be thwarted by the reality of their daily lives. A single mother with a low income, low literacy level, no form of transportation, and no child care is likely to have limited capacity to select, purchase, and prepare foods that promote her children's health. For people to make healthy choices or to meet their health needs an empowerment process must operate at both the level of the individual as well as the level of the environment. My understanding of the socio-environmental health promotion perspective sensitised me to be alert to larger hidden power positions, conditions, and relationships

that perpetuate differences between and among people and limit their agency or capacity for health (Charmaz, 2006; Labonte, 1993). This perspective is congruent with constructivist grounded theory methodology whereby the researcher recruits individuals, interacts with them to gain insights into their actions, their situations, their problems, and co-constructs with them the process they engage in to feed their children, thereby minimizing the power position of the researcher, providing a voice for participants, and potentially contributing to their desire to take actions that can be an empowering experience (Charmaz, 2002; Rodwell, 1996). The socio-environmental health promotion perspective and its socio-ecological lens facilitated a multifactoral exploration from all levels of influence that affect mothers' food choices for their preschool children. It was used as a starting point to inform the conceptualization of the study phenomenon and to guide the literature review. In the literature review in Chapter Two, I discuss previous studies that explored various factors at different levels of influence that affect how mothers make food choices for their pre-school age children. These studies provide limited information on the associations or connections between/among factors. This constructivist grounded theory study was needed to explore the actions and interactions within and between/among these factors at different levels of influence to understand the process that mothers living in the CBRM used to make food choices for their preschool age children.

Personal Location

It is my contention as well as that of others that promoting health is a cornerstone of professional nursing practice (Canadian Public Health Association [CPHA], 2010; CHNC, 2011). As a public health nurse working in Cape Breton for over fifteen years I

was confronted regularly by the health impacts of obesity on the individuals and families with whom I worked and by the realities of the cultural, environmental, and social limitations inherent in addressing this issue effectively. Mothers often expressed concerns related to the price of nutritious items compared to less nutritious ones. Many mothers seemed to be misinformed regarding the nutrition content of food and the nutritional requirements and normative food habits of preschool age children. Mothers sometimes discussed the role of child-directed food advertising played in influencing the food choices their children requested. Generally, mothers openly shared their frustrations and challenges of trying to make food choices to promote and protect their children's health.

In carrying out this study I recognized that my knowledge and experiences as a white, middle class, public health nurse, academic, and mother influenced my views on issues such as children's health, childhood overweight and obesity, food choice, and mother's responsibility. Many of these terms are value laden and hold different meanings for different individuals or groups. It was important that I remained aware of my own assumptions relating to these ideas. One of my tasks in conducting this research was to be deliberate in reflecting upon and questioning my own taken-for-granted assumptions. My view of health is similar to the WHO (1986) definition as a state of physical, mental, social, and spiritual wellbeing. I recognize health as a socio-ecological construct in that health is not given to people, but generated by them. To maintain health people constantly engage in often problematic processes of adapting to the individual, interpersonal, physical, material, cultural, economic, and social circumstances of their environment. Childhood overweight and obesity diminishes health, increasing children's risk of disability, decreasing quality of life, and contributing to premature death. I

acknowledge that interpersonal, social, economic, political, cultural, and environmental factors influence the food choices that mothers make and recognise that mothers shoulder the responsibility for protecting their young children's health through the food choices they make. I contend that this responsibility often comes without the power necessary to address it.

Purpose of Study

The purpose of this study was to generate a theoretical understanding of the process in which mothers living in CBRM engaged while making food choices for their preschool age children. To this end, this inquiry used a constructivist grounded theory methodology (Charmaz, 2000, 2002, & 2006). Eighteen mothers described how they made food choices for their preschool age children.

Significance of Study

The NSOHP (2005) identified improving the eating patterns of children and youth as a priority area where action is needed. Consistent with recommendations for future research (CPHI, 2004; Health Canada, 2001; IOM, 2004; NSOHP, 2005) this study focused on creating a better understanding of the interactions among individual, interpersonal, and broader social and environmental factors in relation to food choice and healthy eating. This study depicts the process that mothers use when making food choices for their preschool age children and identified individual and environmental strategies and policies that could have the greatest potential to improve mothers' ability to make food choices that promote their children's health. Enhancing mothers' ability to make healthy food choices would diminish their children's risk of becoming overweight and obese. Health providers such as community health nurses who work in a variety of health

and community settings are well positioned to provide opportunities to promote children's health. The findings of this study may be used by community health nurses and other health professionals in collaborating with community and government agencies to address the serious public health problem of childhood overweight and obesity.

Layout of thesis

This thesis is presented in eight chapters. In this first Chapter, I outlined the background of the problem, situated the research problem within the gap addressed by this study and briefly described constructivist grounded theory methodology. I also explained the relevance of the socio-environmental health promotion perspective to this inquiry, my personal location, the purpose of the study, the study significance, and the organization of the thesis.

Chapter Two is a synthesis of the literature that provided a contextual overview presented within a socio-ecological outline of the many individual, interpersonal, organizational, community, and policy level factors that influence mothers' food choice practices for her preschool age children.

Chapter Three is a discussion of constructivist grounded theory methodology that was used in this inquiry, its compatibility with the socio-environmental health promotion perspective and the study of health promotion phenomena. The specific methods used in this inquiry, the methods used to enhance scientific integrity, and ethical considerations are discussed.

Chapters Four, Five, and Six include the findings of this study. Chapter Four is an overview of the substantive theory, *Persistent Optimizing*, which represents an integrated theoretical rendering of the multiple voices, views, and visions of the process

that 18 mothers' employed in making food choices for their preschool age children. *Acknowledging Contextual Constraints*, the first of three major conceptual categories that make up *Persistent Optimizing* is presented and described in Chapter Four. *Stretching Boundaries* and *Strategic Positioning*, the two remaining conceptual categories are separated and presented in Chapters Five and Six.

Chapter Seven begins with a brief overview of the substantive theory of *Persistent Optimizing.* It includes a discussion of how the findings of this study compare with and extend the existing literature and related theoretical perspectives.

Chapter Eight contains study conclusions. In addition, study limitations, implications for nursing practice and policy, nursing research, and nursing education based on the findings of this study are identified and discussed. Final thoughts on the study are shared.

CHAPTER TWO: LITERATURE REVIEW

In this Chapter, I present a synthesis of the literature that provides the reader with an overview of the many individual, interpersonal, organizational, community, and policy level factors that influence mothers' food choice practices for their young children. Consistent with constructivist grounded theory methodology (Charmaz, 2006), I limited the initial review to sensitising concepts and theories in the substantive area and present a more extensive review of the literature following my analysis in Chapter Seven.

Findings from relevant studies are included that were located through a search of the electronic literature on the Cumulative Index of Nursing and Allied Health (CINAHL) and Pub Med databases using a variety of subject headings relating to mothers, food choices, children, toddlers, preschool, nutrition, childhood obesity and overweight, social and environmental determinants of obesity. In addition, I sought out and used additional literature found while exploring various topics in specific journals and from sources suggested by others.

Contextual Factors and their Influence on Mothers' Food Choices: A Socio-ecological View

Individual Level Factors

Individual child behaviours that increase one's risk of becoming overweight or obese include food consumption patterns, sedentary behaviour, and physical activity. Children have agency when it comes to food choices. According to Rentfro (2010), the preschool child, although still prone to unpredictable emotional behaviours, is progressively becoming more independent, self reliant, and socially adept. Additionally, her or his facility with language is becoming more similar to that of an adult. In eating

situations, even though it is the mother who offers the food; it is the child who decides whether or not to eat it (Satter, 2005). Mothers are frequently challenged to promote nutritious food choices as children's preferences are often towards foods that are energy dense and drinks that are high in sugar (APHA, 2005; Davidson & Birch, 2001; Dwyer, Needham, Simpson, & Heeney, 2008; Holsten, Deatrick, Kumanyika, Pinto-Martin & Compher, 2012).

Children's food consumption: Cultural influences. Children's food consumption patterns have been associated with parental feeding styles. Baumrind (1971) contends that the majority of parents display one of three parenting styles; authoritarian, authoritative, and permissive. Birch and Fisher (1995) adapted these parenting styles to describe the style of parents' child-feeding practices. Each parental feeding style is rooted in cultural belief systems and parental theories or ethno-theories of appropriate behaviour (Engle, Bentley & Pelto, 2000). According to Cockerham (2005), culture inscribes a habitual way of acting when performing routine tasks. It determines the way we think, what we value or prioritize, how we relate to others, our patterns of living and our preferences for particular foods (Raeburn & Rootman, 1998: Sallis & Owen, 1997). The very act of eating is deeply embedded in one's culture (Sallis & Owen, 1997). According to Engle et al. (2000), cultures vary along a dimension of control over children's eating. On one end of the spectrum, parents with an authoritarian feeding style attempt to control their children's eating with little consideration for the children's choices and preferences. On the other end of the spectrum, parents with a permissive child feeding style indulge, or almost nutritionally neglect the child (Patrick, Nicklas, Hughes & Morale, 2005), permitting her/him to control what, when, where and how much they eat. Choices are

limited only by what is available. Finally, authoritative child feeding practices balance out these two extremes. Parents with an authoritative feeding style involve the child in making food choices while offering and encouraging healthy foods.

Every culture has its particular food practices and activities that surround procuring, distributing, storing, consuming, and disposing of food (Chiang-Hanisko, 2010). Cultural factors associated with ethnicity play a role in child feeding practices and influence children's nutritional status (Faith et al., 2003). Ventura, Gromis, and Lohse (2010) used semi-structured interviews and two questionnaires to describe the feeding practices and styles used by a diverse sample of 32 low-income parents of preschool age children. Data analyses revealed that East Asian parents had more indulgent feeding styles and placed few demands on their children's dietary intakes. In contrast, Black parents placed more demands on the amounts and types of foods their children ate compared to Hispanic and non-Hispanic white mothers. Faith et al. (2003) conducted a secondary analysis of the National Longitudinal Survey of Youth main and child cohorts on over 1000 Hispanic, African American, and non-Hispanic/non-African American children, aged 3 to 6 years. They found that non-Hispanic/non-African American mothers permitted their children a greater number of food choices than mothers of African American or Hispanic children.

According to Faith, Scanlon, Birch, Francis, and Sherry (2004), particular parental child feeding strategies may predispose children to becoming overweight and obese. A comprehensive literature review conducted by these authors found that parental feeding restriction was a strategy most notably associated with children's increased food consumption and weight status (Faith et al., 2004). As early as 1994, Johnson and Birch

reported that excessive control by parents in regard to feeding preschool age children was associated with poorer eating regulation and thus an increased risk of obesity. Baughcum, et al. (2001) developed a preschool feeding questionnaire to explore possible factors that may lead to childhood obesity. These authors found that obese mothers demonstrated a feeding style that was more restrictive than non-obese mothers. Fisher and Birch (1999, 2002) noted that restricting children's access to snack foods may increase children's preferences and requests for such prohibited foods. Similarly, Clark, Goyer, Bissell, Blank, and Peters (2007) reported that the overly controlling food practices of parents with authoritarian parenting styles have been linked to children's inability to regulate their own intake in response to their own internal hunger and satiety cues. Patrick et al. (2005) found that parents with authoritative parenting styles were more likely to have fruits and vegetables available in the home and were more successful in getting their children to eat dairy, fruit and vegetables. Culture often determines the values, beliefs, attitudes, and practices accepted by a group or community (Goody, & Drago, 2009) and it plays a significant role in determining mothers' food choice practices for their children. According to Lyman, Browne, Kirkham and Anderson (2007), cultural practices create contexts that have the potential to foster or inhibit health.

Physical activity and sedentary behaviours. Children's decreasing levels of physical activity and their increasing preference for sedentary activities such as television viewing, surfing the web, and playing video games, correlate significantly with children's increased risk of becoming overweight (APHA, 2005; Dehghan, Akhtar-Danesh, & Merchant, 2005; Government of Nova Scotia, 2011; PHAC, 2011; Reilly, 2008). Recent Canadian physical activity guidelines introduced by the Canadian Society for Exercise

Physiology ([CESP], 2012) propose that in order to promote healthy growth and development, children aged three to four years should accumulate at least two hours of physical activity at any intensity throughout the day, and at five years, children should accumulate one hour of moderate - to vigorous-intensity physical activity daily. In addition, sedentary activity including screen time should be limited to less than one hour a day for three to four year old children and two hours a day for five year olds (CESP, 2012).

Tucker (2008) carried out a meta-analysis of published research from seven countries to examine the prevalence of physical activity among children aged two-six years. She found that almost 50% of the preschoolers in the 39 primary studies reviewed engaged in less than 60 minutes of moderate to vigorous physical activity per day. These children would not be meeting the CESP (2012) recommended guidelines. Similarly, Active Healthy Kids Canada (2011) issues an annual report card that measures the level of physical activity among Canadian children and youth aged 5-17 years. The Active Healthy Kids Canada (2011) report card noted that only 7% of Canadian children and youth were meeting the new Canadian physical activity guidelines of at least 60 minutes of moderate -to vigorous-intensity physical activity daily. In addition, the report concluded that Canadian children were getting six hours of screen time on weekdays and more than seven hours on weekend days. Growing evidence indicates that many preschool age children are leading increasingly sedentary lives and are not meeting the age appropriate recommended levels of physical activity. These behaviours increase children's risk of becoming overweight or obese in the modern obesity-producing environment (Reilly, 2008). These lifestyle factors increase the complexities with which

mothers must contend when making food choices for their preschool age children that promote their health and that do not increase their children's risk of becoming overweight.

Interpersonal Level Factors

Gender. The gendered nature of feeding a family is well documented in the literature (Attree, 2005, 2006; DeVault, 1991; Moss, 2002; Spitzer, 2005; Travers, 1996). One of the most fundamental features of women's lives is their responsibility for caring for family and household labour. Canadian women spend greater amounts of time than men on household work and more than twice as much time on child care as men (Statistics Canada, 2010). Mothers generally select the foods brought into the home, determine how often and what types of meals are eaten outside the home, and model eating and physical activity behaviours (Beagan, Chapman, D'Sylva, & Bassett, 2008; Davidson & Birch, 2001; Holsten et al., 2012; Lindsay et al., 2006; Moore, Tapper & Murphy, 2007).

To explore how family members perceive and justify the division of food work in their households. Beagan, et al. (2008) interviewed multiple family members from three ethno-cultural groups living in Nova Scotia and other parts of Canada. Families were European Canadians, Punjabi Canadians, and African Canadians. They found that in almost all families in their study, women were primarily responsible for food work. According to these authors, the mothers in their study rationalized that it was simply easier for them to do the food work themselves.

In an earlier study, Travers (1996) conducted an institutional ethnography to explore the social organization of nutritional inequities among socio-economically

disadvantaged families within Nova Scotia. She found that the household work of planning and preparing meals was primarily or solely the responsibility of women. Even when older children or male partners were present to share this responsibility, women maintained the burden of work. Travers noted that part of the difficulty in transferring some of the feeding work to others was its 'invisible nature'. In particular, the work of monitoring supplies and planning meals generally went unnoticed. Interestingly, Travers noted that this type of work falls outside the frame in which male definitions of work have been constructed. The invisible nature of women's feeding work has also been described by DeVault (1991). DeVault highlighted the importance of thoughtful foresight, paying attention to the many aspects of feeding work and staying open to ongoing events and interactions as part of the invisible work that mothers do when preparing food. In describing the work of a mother preparing a meal, DeVault notes:

> "Doing a meal" requires more than just cooking; it takes thoughtful foresight, simultaneous attention to several different aspects of the project, and a continuing openness to ongoing events and interactions. These kinds of effort must be considered part of the work of feeding a family, but they are seldom identified as work: they remain invisible even as they are done. (p. 55)

Income, race, and social class. Income, race, and social class are interpersonal level factors that interrelate in influencing mothers' ability to make lifestyle choices such as food choices. Income affects food choices both directly and indirectly through the dispositions associated with particular social class locations (Power, 2005). Within market systems designed to promote choice, differences of income bring inequalities in

terms of opportunities to make healthy choices in where one lives, the foods eaten, and even how leisure time is spent (Department of Health London, 2004b).

Nova Scotia reports one of the highest rates of female-headed lone parent families within Canada and is among one of the provinces reporting the highest rates of poverty among lone-parent families (Statistic Canada, 2009). In general, women are increasingly more vulnerable to poverty due to labour market inequities, marriage breakdown, and motherhood (Reid, 2002). Women as lone parents, particularly those with preschool age children, reported lower benefit levels and lower rates of labour participation (Broughton, Janssen, Hertzman, Innis, & Frankish, 2006).

According to a report by the Canadian Association of Social Workers ([CASW], 2005), Black women are in double jeopardy in terms of income. In being Black, they belong to a minority whose income is among the lowest in Canada and in being women, they have less income than Black men. Black people as a minority group receive about 20% less total income than Canadians in general (CASW, 2005). Within Canada, Nova Scotia reports one of the largest incidences of poverty among Black women in families. Black women in Nova Scotia experience racism in education and employment which, in turn, has an impact on income and poverty (Black Learners Advisory Committee [BLAC], 1994).

When this study began, Nova Scotia had one of the lowest minimum wage rates in the country (Nova Scotia Environment and Labour, 2005). Paid work at minimum wage is seldom a practical or cost-effective option for many single Nova Scotian mothers (Colman, 2000). Their household and child caring responsibilities often result in their ability to take only low-paying, part-time, or temporary work. Based on data from

Statistics Canada's National Population Survey, Perez and Beaudel (1999) reported that earnings from this type of work are seldom able to offset the actual expenses acquired from working. Since the data for this study were collected, the minimum wage in Nova Scotia has steadily increased and is now on par with other Canadian provinces (Nova Scotia, Canada, 2012)

The diminished household income experienced by single mothers significantly influences the food choices they are able to provide for their children. In Canada, single mothers with children and individuals living on social assistance are among the groups that experience higher rates of food insecurity (Health Canada, 2006; McIntyre & Rondeau, 2009). Aboriginal women experience greater levels of poverty and therefore endure higher levels of food insecurity than non-Aboriginals (Health Canada, 2006; Power, 2008). The term food insecurity may be defined in different ways. The National Research Council (2005) describes food insecurity as a broad conceptual model comprising three concepts: food uncertainty, food insufficiency, and hunger. In a Canadian context, food insecurity is defined as the inability to attain or consume a diet of adequate quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so (Davis & Tarasuk, 1994; McIntyre & Rondeau, 2009; Williams, 2009).

Nova Scotia, at 14.6%, has a significantly higher prevalence rate of families reporting moderate to severe income-related food insecurity than the Canadian average of 9.2% (Health Canada, 2006). Households headed by a female lone-parent, households with at least one child under 6 years, and those with 4 or more children are the most vulnerable to food insecurity (Health Canada, 2006). Individuals living in food insecure

households characteristically worry about running out of food, not having money to get more food, and not being able to afford balanced meals (Tarasuk, 2009). Individuals who do not consume adequate amounts of good quality, nutritious foods can experience short and long term effects on physical and mental health (Nova Scotia Participatory Food Costing Project, 2009). Household food insecurity is a serious public health problem in Canada (Tarasuk, 2009). In Nova Scotia, food security is a public health priority (NSOHP, 2005).

The Nova Scotia Participatory Food Security project (Williams et al., 2006; Williams, 2009) is a collaborative partnership between community members, provincial and federal levels of government, and academics. This collaborative group regularly conduct participatory food costing research to estimate the cost and affordability of Nova Scotia households such as those earning a minimum wage to provide a basic nutritious diet. Williams et al. (2006) and Williams (2009) concluded that relying on minimum wage, Nova Scotians, in particular female lone-parents, could not afford to purchase a nutritious diet and to meet their basic needs.

Glanville and McIntyre (2006) studied lone mothers living with at least two children under the age of 14 in Atlantic Canada. Administering weekly 24 hour dietary recalls to these mothers over a one month period, they found that 85% of children 4-14 years of age had inadequate diets. Mothers were noted to compromise their own nutritional intake in order to preserve the adequacy of their children's diets. This type of chronic food insecurity has implications not only for nutritional inadequacy and poor health but also for the development of obesity (Bowman & Harris, 2003; Dubois, Farmer, Girard & Porcherie, 2006). Tarasuk, McIntyre, and Li (2007) reported that individuals

living in insecure households consume less fruits, vegetables, and milk products and more inexpensive, energy dense, nutrient poor foods. Williams, McIntyre, and Glanville (2010) conducted focus groups and individual interviews to assess challenges that low income, lone mothers living in Nova Scotia faced in accessing milk for their families. They found that milk insecurity, or the lack of access to affordable milk through socially acceptable ways, was a distinct feature of food insecurity for this population, with potentially serious health implications. The main barrier for accessing milk was mother's inability to afford it. In addition to not being able to afford nutritious foods on a regular basis, mothers in low income households also demonstrate less resourcefulness in regularly providing healthy foods for their families (Patrick & Nicklas, 2005; Raine, 2005). Mothers reporting limited personal and household resources such as less access to healthy foods, fewer kitchen appliances, and a lower rating of their cooking skills were noted by Broughton et al. (2006) to be at greater risk of experiencing household food insecurity.

Social ideals of the 'good mother' may have an impact on the food choices low income mothers are able to provide for their families. Attree (2006) carried out a systematic review of qualitative studies that prioritized low income mothers' accounts of managing in poverty. Synthesizing findings from a subset of studies that focused on diet, nutrition, and health in poor families, Attree found that low income mothers felt obliged to purchase foods that were similar to what children from advantaged households ate so that their children would fit in with their more affluent peers. This often meant purchasing more expensive, less nutritious foods, as children's preferences tended to lean towards energy dense foods and high sugar drinks (APHA, 2005; Colapinto, Fitzgerald,

Taper, & Veugelers, 2007; Davidson & Birch, 2001). McIntyre, Officer, and Robinson (2003) reported similar findings in their study of 141 low income lone mothers living in Atlantic Canada. They noted that women described purchasing more expensive food items and other products in an effort to manage the appearance of poverty.

Eating the same foods as others may reflect the desire of low income mothers to allow their children to fit into the dominant culture through food (Raine, 2005; Stone, 1988). Raine (2005) suggested that the concept of 'belonging' may be an important factor in understanding the food choices mothers select for their children. According to Bourdieu (1990), choices tend to reflect class position as individuals in the same social class share a similar constituted system of structured and structuring dispositions that are learned through practices, referred to as habitus. Habitus, similar to culture, inscribes a habitual way of acting when performing routine tasks (Cockerham, 2005). Bourdieu (1984) in his discussion on the "distance from necessity" pointed out that the greater the distance a person is from foraging for economic necessity, the greater their time and ability is to adopt tastes or choices more in line with a more privileged class status. The desire of mothers in these studies (Attree, 2006; McIntyre et al., 2003) to give the appearance that their children were able to have the same food choices as more affluent children necessitated that mothers compromise on basic necessities, such as adequate food for themselves, as they were economically unprepared to make these choices.

Single parent households, low income households, and those with two working parents more often reported having less time to prepare nutritious meals made from whole foods. These families demonstrated a greater tendency towards choosing convenience foods that were less costly, quicker and easier to prepare, but higher in fat

and sodium (Broughton et al., 2006; Gable & Lutz, 2000; Patrick & Nicklas, 2005; Raine, 2005). Bowman and Harris (2003) used data from the United States Department of Agriculture's, 1994-96 Continuing Survey of Food Intakes by Individuals and the 1998 Supplemental Children's Survey to examine whether preschool age children in single female headed and two parent households differed in regard to their food choices and television viewing practices. These authors explained that food choices made by lone and subsequently lower income female headed households included higher amounts of high fat foods such as milk, frankfurters and sausages, and lower amounts of relatively expensive fruits such as melons and berries. These families also consumed more non-diet carbonated beverages and sweetened fruit- flavoured drinks than two parent families. Notably, in both types of households, preschool age children's consumption of added sugars far exceeded recommended levels. These sugars were mostly consumed as fruit-flavoured drinks and non-diet carbonated beverages. Bowman and Harris stated that children living in single-parent households watched approximately three hours of television or videos a day compared to two and a half hours watched by children in two parent households.

Children who live in economically disadvantaged households and who frequently consume less costly, convenience foods that are higher in fat, sugar, and sodium may be at greater risk of becoming overweight and obese. The Statistics Canada, National Longitudinal Survey of Children and Youth (1994-1999) found that 25% of Canadian children between the ages of 2 to 11 whose families reported incomes below the low-income cut-off (LICO) rate were considered obese compared to 16% of children whose families reported incomes above the LICO rate (Statistics Canada, 2002). Dubois et al.,

(2006) studied the relationship between family food insufficiency and preschool weight. In a population-based cohort of preschool children, using data from the Longitudinal Study of Child Development in Quebec (1998-2002), these authors reported an association between food insufficiency at the family level and increased likelihood of overweight/obesity among preschool children. Similarly, Mark, Lambert, O'Loughlin and Gray-MacDonald (2012) used data from the Canadian Community Health Survey Cycle 2.2 to examine the influence of income and the conjoint influence of low income and food insecurity on a number of dietary indicators in a representative sample of Canadian youth aged 9-18 years. They found that height was lower in low income boys and girls, and low income girls along with boys living in low income, food insecure households had a higher prevalence of being overweight.

Literacy and education. Literacy is defined by the Canadian Public Health Association Expert Panel on Health Literacy (2008) as "the ability to understand and use reading, writing, speaking and other forms of communication as ways to participate in society and achieve one's goals and potential" (p.3). A parents' ability to select and prepare meals is influenced by their ability to access, understand, and use nutritional information (NSOHP, 2005).

It is estimated that 50% of working age Nova Scotians have limited numeracy literacy (International Adult Literacy Skills Survey [IALSS], 2003). Women who fit into this group would experience great difficulty budgeting for food and following measurements in recipe books. In addition, almost 4 out of 10 adults in Nova Scotia have low prose literacy (IALSS, 2003) that would impair their ability to read food labels and recipes or follow health related diet instructions.

Individuals with limited functional literacy, who have difficulty reading and writing as well as individuals with limited interactive or communicative literacy, who have difficulty interpreting communication or applying information in new situations will be challenged in developing the type of literacy needed to critically analyse information and to use this information to exert greater control over the health choices they make (Nutbeam, 2000). Progressive levels of literacy allow for greater autonomy and personal empowerment that is essential to enhance an individual's ability to make positive health choices from the array of goods and services available in modern society. Developing critical literacy competencies permits an individual to become more health literate. According to Kickbusch, Wait, and Maag (2005):

> Health literacy is the ability to make sound health decisions in the context of everyday life – at home, in the community, at the workplace, in the health care system, the marketplace and the political arena. It is a critical empowerment strategy to increase people's control over their health, their ability to seek out information and their ability to take responsibility (p.8).

The Canadian Council on Learning [CCL] (2008) describes health literacy as the ability of individuals to access and use health information to make appropriate health decisions and maintain basic health. Health literacy skills are needed to perform a wide range of daily tasks which include making healthy life style choices. Applying a health – activity literacy scale to the IALLS (2003) survey, the CCL (2007) reported that about 60% of Canadians do not have the necessary skills to manage their health adequately. Within the CBDHA 64% of the population have health literacy skills that permit them to deal with simple, clear, material involving uncomplicated tasks (CCL, 2007). Health

literacy is part of the fundamental skills needed to function in modern society. Literacy levels are generally, but not always, related to levels of education (Kickbusch et al., 2005).

Educational level plays a factor in food selection. Healthy foods tend to be purchased more frequently in homes of parents with higher levels of education. Ricciuto, Tarasuk and Yatchew (2006) completed a secondary analysis of data from the 1996 family food expenditure survey examining the relationship between socio-demographic factors and food selection among Canadian households. Using non-parametric statistical techniques, these authors found that households where the reference person had a university degree purchased significantly more vegetables and fruit, and less meat and alternatives relative to households with the lowest education.

Similarly, Australian researchers, Turell and Kavanagh (2005) interviewed residents from 1003 private dwellings and found significant associations between education, household income, and food purchasing behaviour. Food shoppers with low levels of education and those residing in low income households, were least likely to purchase foods that were comparatively high in fibre and low in fat, salt, and sugar. Cribb, Jones, Rogers, Ness and Emmett (2011) examined the associations between maternal education level and the diets of 7,474 ten year old children living in the UK. They found that children of mothers with higher levels of education consumed greater amounts of fruit and vegetables. Children of mothers with lower levels of education had a higher intake of less healthy foods including meat pies, sausages, burgers and kebabs. Contento et al. (1993) explored the criteria that 218 predominantly Latino mothers used to select food choices for their four to five year old children. They found that mother's

choices were influenced by their food knowledge. Mothers with greater knowledge chose healthier foods; mothers also selected some foods based less on health and more on what children preferred. According to Kickbusch (2007), " the active and critical consumer is an ideal that only a few members of the population can aspire to achieve, particularly if they are not well educated or even functionally literate" (p.3) .

Mother-child feeding relationship. The interpersonal level mother-child relationship plays an important role in determining the food choices that mothers select for their children. Even at preschool age, children influence their mother's choices. Satter (2005) asserts that there is a specific allocation of responsibilities in the feeding relationship between parents and their preschool age children. According to Satter, the parent assumes responsibility for *what*, *when,* and *where* the child eats and the child assumes responsibility for *whether* and *how much* she or he eats. The following studies examine more closely the motivations, practices, and beliefs expressed by mothers related to their selection of food choices for their preschool age children.

Alderson and Ogden (1999) conducted a survey of 218 mothers of children 5-11 years of age to explore the behaviour and motivations that influence mothers' choices of food for themselves and for their children. Participants were mainly Caucasian mothers from lower and working class social status. Parametric data demonstrated that mothers were motivated by health factors such as nutritional value and long term health impact when choosing foods for their children. In contrast, when choosing foods for themselves, mothers were motivated by practical factors such as availability, cost, and caloric content. Interestingly, while mothers reported health as the most important motivator for children's food choices, they tended to feed their children in less healthy ways than they

fed themselves. Children were offered less healthy foods such as more sweet products, and more unhealthy breads and dairy products. This finding suggests a knowledge gap regarding what constitutes a healthy diet for children and also indicates a gap between motivations and behaviours. Generalizability of the findings of this study was limited by a low response rate and notable differences between the age and body mass index of responders and non-responders.

Contrary to the findings by Alderson and Ogden (1999), other studies did not find major differences in the foods mothers selected for themselves and those they chose for their children. Baughcum, Burklow, Deeks, Powers, and Whitaker (1998) used focus groups to explore the maternal feeding beliefs and practices of 14 low income mothers with children one to three years of age. In this qualitative study, mother's beliefs influenced feeding practices that could contribute to their children becoming overweight and obese. Mothers believed that a heavy child represented a healthy child and signified successful feeding and parenting. In addition mothers believed that if they were hungry then their child must also be hungry. Mothers reported selecting foods for their children based on the foods that they themselves liked. They used children's favourite foods as treats or rewards to encourage good behaviour. Intergenerational influences on food choice were noted as mothers acknowledged ignoring the nutritional advice of physicians and nutritionists and following the advice of their own mothers.

Hoerr, Utech and Ruth (2005) noted some similarities to Baughcum et al.'s (1998) findings. These authors conducted a qualitative study using a purposeful sample of 29 limited income Head Start parents of children aged three to five years. Participants included 27 mothers, one father and one grandmother. Using discussion groups this study

aimed to identify potential barriers to positive mealtime and to describe parents' perceived feeding practices for their preschoolers relating to six key feeding constructs identified from the literature. Participants reported that food choices for meals and snacks were frequently determined by their preschool age children. Food choices, such as vegetables were not offered if parents did not like these foods and unhealthy snacks were given to motivate children to eat their meals.

Campbell, Crawford, & Hesketh (2006) also explored the influence of children's preferences and parents' beliefs on choices of foods they provided to five and six year olds. These authors used in depth semi-structured interviews to elicit the views of a socio-economically diverse group of 16 mothers and one father. In this qualitative study, participants were asked to comment on factors that they felt influenced their five and six year old child's food choices as well as their own decision making regarding the food choices they provided for their children. These authors noted that children's food preferences influenced the food choices that parents provided.

Campbell et al. (2006) found that parents purchased children's preferred food choices based on varying beliefs such as children had different tastes than adults, children have the right to choose their own foods and that children may not eat enough, if the food they wanted was not made available. Slater, Sevenhuysen, Edginton and O'Neil (2011) conducted semi-structured interviews using the Food Choice Map with eleven middle-income, employed mothers of elementary school age children. Consistent with previous findings these mothers indicated that accommodating family member's likes and dislikes, was important when making food choices. In addition, similar to Baughcum et al. (1998), Alderson and Ogden (1999) and Hoerr et al. (2005), Slater et al. (2011) and Campbell et

al. (2006) explained that parents used foods such as desserts as motivators to encourage children to taste or finish their meal even while recognizing this as an undesirable strategy. Parents felt that eating with their children as well as allowing their children to assist with meal preparation positively influenced their food choices. According to Campbell et al., understanding the attitudes and beliefs that influence parental food choices for their children is likely to be significant in supporting parents to promote foods that will protect their children from becoming overweight and obese.

McGarvey et al. (2006) conducted focus groups with low income, culturally varied, American mothers to explore their child feeding practices and beliefs. The themes identified in this study were similar to the previous studies discussed. Mothers reported wanting to provide their children with healthy food choices, yet used unhealthy foods to influence their children's behaviour, and mothers tended to use the advice of their own mothers related to child feeding. Using a grounded theory approach to analyze their data, McGarvey et al. found that mothers made food choices for their preschool age children based predominantly on their instinct, advice from their own mothers, and food information provided by media particularly, television talk shows, radio, magazines, and books. Nutritional advice related to infant feeding from doctors and nutritionists was noted by some mothers. All mothers expressed a desire to enhance their children's health and well being. However, these mothers did not acknowledge that being overweight or obese might be a potential problem during the preschool years. In addition these mothers reported using foods to influence their preschooler's behaviour; they bargained foods to avert misbehaviour and offered food to reward good behaviour. Similarly, a qualitative pilot study of 27 middle class women by Morton, Campbell, Santich and Worsley (1999)

found that mothers restricted food choices for their two year olds that were considered unhealthy but also offered less healthy foods as rewards to promote good behaviour.

Shriver, Hildebrand, and Austin (2010) conducted an in depth assessment using the transtheoretical model of behaviour change to explore the factors that influenced 113 low income, Hispanic parents/guardians' decisions to serve fruit and vegetables to their preschool age children. Using surveys and focus groups they found that 60% of the sample surveyed were in pre-action stages, demonstrating a lower confidence for serving fruit and vegetables to their children. The cost of fruit and vegetables and the time and skill it takes to prepare them impeded the intentions of parents and guardians to serve more fruits and vegetables.

Mothers' concerns and challenges relating to making food choices that reduce the risk of their children becoming overweight is reported in the following study by Tucker, Irwin, He, Bouck, and Pollett (2006). These researchers used a maximum variation sample of 72 Canadian mothers of preschoolers to participate in semi-structured interviews that explored their perceptions of their preschoolers' food choices. All mothers identified food choices and food issues as key factors influencing their children's overall health. Time restraints and societal pressures were challenges to providing healthy food for their preschoolers. Mothers reported they often did not have the time required to prepare healthy meals. To counterbalance this problem mothers opted for more convenient, less healthy foods in fast food restaurants. Mothers acknowledged feeling social pressure to ensure that their children grow up healthy and not have to endure the psychological torment associated with being overweight. Mothers reported using bribery, education, and being creative as ways to facilitate healthy food choices; unhealthy food

choices were used as bribery to motivate children to eat their meals. Mothers believed that educating children about healthy choices and offering foods that appear appealing and fun enhanced their children's acceptance of healthy foods. Participants from low socioeconomic groups voiced nutritional concerns similar to other groups but reported that just getting food on the table was a more pressing priority. Authors report the use of only one form of data collection as a limitation of this study. Previous studies discussed in this review (McIntyre et al, 2003; Broughton et al. 2006; Glanville & McIntyre, 2006; Williams et al. 2006) attest to the challenges of low income parents in providing healthy food choices, or even adequate nutrition, for their children.

Recognition for the importance of the mother's role in childhood nutrition is noted by Stratton and Bromley (1999). These researchers systematically interviewed 149 family members from a total of 83 British families. Sixteen families had children under the age of five years. Family members were invited to describe their decisions, behaviours, and processes related to food choice. Using the qualitative method of attributional analysis, data were obtained in the form of 7,062 fully coded belief statement or attributions. Findings indicated that mothers were described by themselves and the rest of the family as having the most significant role in food choices. Mothers made food choices based on children's food preferences, describing requests for food as positive, rather than pestering. Unlike most of the previous studies discussed, these findings suggest that the nutritional value of food was not as much of a consideration as providing food that was enjoyed and more certain to be eaten. Stratton and Bromley found that television viewing was not perceived as pernicious, or as a strong influence on family food choice. Family members saw themselves as a stronger influence than

advertising in the selection of food choices. However, the role of advertising in influencing children's food requests was not fully addressed. The authors note that in their attributional analysis, the intent was to observe and report family accounts, not measure causal influence directly. Direct simple reports of causal influence were counted. These authors acknowledge that some issues might be underrepresented if participants considered a particular issue to be too obvious to mention or so habitual it was not thought about.

These findings from the literature indicate that much of the research exploring mothers' food choice practices for their children examine particular individual and interpersonal level factors such as parenting styles and education levels, children's food preferences, health benefits, and time and effort to prepare foods. No studies were found that explored how these factors interacted with one another to develop a deeper understanding of the process that mothers used to make food choices for their children. This is a gap in the literature that needs to be explored.

Community and Organizational Levels Factors

Communities are affected by the interactions of organizations, institutions, and social networks (McLeroy et al., 1988). It is relevant to this study that preschoolers, often in the company of their mother, tend to spend time at various formal and informal institutional settings and networks such as day care centres, family resource centres, church or community based functions. These community settings and networks create a complex set of factors that could influence the food choices mothers make for their preschool age children.

Access to food. Families that live in rural or deprived communities in North America often have less ready/easy access to large supermarkets that provide variety and lower prices on healthy foods. Williams (2009) reported that the average monthly cost of a basic nutritious diet in grocery stores in rural Nova Scotia is greater compared to those located in urban areas. The responsibility to shop around to find food bargains usually falls on mothers. Public transportation is generally limited in these area; mothers often resort to the added expense of a taxi ride to transport their grocery order (Attree, 2006; Travers, 1996). These authors concluded that the time and effort mothers spend in searching for food bargains, particularly when accompanied by young children is a continuous source of stress.

Paradoxically, low socio-economic communities that lack supermarkets, fresh produce stands, and other healthy alternatives generally boast an abundance of fast food operations offering less healthy alternatives (Moore & Diez Roux, 2006; Raine, 2005). Fast food outlets and restaurants offer portion sizes often two to five times larger than original portion sizes (Young & Nestle, 2003). These large or super-sized portions of food offered to children by fast food outlets and restaurants often contribute to mothers inadvertently over feeding their children; many mothers are uncertain about the appropriate serving size for children of different ages and have limited knowledge about the nutritional quality of foods (Colapinto, et al., 2007; Davidson & Birch, 2001; Rolls, Engell & Birch, 2000). Communities where members are particularly challenged by their surroundings to provide healthy foods for their families may be living in food insecure communities. Community food security, according to Hamm and Bellows (2003), refers to communities where all its members have access to safe, culturally acceptable,

nutritionally adequate diets through a sustainable food system that emphasizes self reliance and social justice.

Physical design. At the community level, physical design is an important factor related to people's activity patterns. Rural and less affluent communities have social and physical environments less conducive to maintaining a healthy weight (Oliver & Hayes, 2005) in that they often lack resources such as safe and attractive walking, biking and skiing trails, parks and recreational facilities for indoor sports and activities (Dehghan et al., 2005). McGarvey et al. (2006) found that mothers' concern for their children's safety was a major barrier to permitting their children to play outdoors unless their mother was present with them.

Oliver and Hayes (2005) used cross sectional data from Cycle 4 (2000-2001) of the National Longitudinal Survey of Children and Youth and data from Statistics Canada 2001 Dissemination Area databases and socio-economic status quartiles to explore the relationship between neighbourhood socio-economic status and the prevalence of overweight Canadian children and youth. These authors concluded that controlling for age, gender, family income, and education, hierarchical analysis found that children's risk of being overweight increased if they lived in a low versus a high socio-economic status neighbourhood.

Findings related to access to facilities and services and preschoolers' activity are mixed. Burdette and Whitaker (2004) carried out a cross sectional study of 7,020 urban, low income, preschool children. They found that being overweight was not associated with proximity to playgrounds or to fast food restaurants. Sallis, Nader, Broyles and Berry (1993) studied the physical activity patterns of 201 Mexican American and 146

Anglo American preschoolers. In observing their evening time behaviours they noted that preschool children were more active when they had easy access to outdoor spaces that permitted vigorous play and when they spent more time in these places. It would appear that access to safe spaces to play and actually getting outdoors to engage in play is more significant than proximity to playgrounds.

The structure and planning of many rural and residential areas discourage physical activity being mainly designed for dependence on automobiles to transport children to and from school or to recreational facilities. Children seldom have the opportunity to walk to preferred destinations (APHA, 2006; Dehghan et al., 2005). These attributes increase the obesity-producing nature of the environment (Saelens et al., 2012) as decreased access for walking and engagement in other physical activities impacts on the energy intake that children can manage without increasing their risk of becoming overweight. In this light, the physical environment poses an additional challenge to mothers who must account for their children's limited energy expenditure when selecting food choices.

Societal/Policy Level Factors

At a societal level, policies at the local, regional, provincial, and federal levels can significantly impact health choices and behaviours. Individual health is best promoted in an environment that enables individuals to engage in healthy behaviours and to choose healthful options among goods and services available (Green et al., 1996). As previously noted, many Nova Scotian women have incomes that limit their food choices. These women are dependent on many policies including for example those that determine social assistance and minimum wage allowances. A mother's ability to make food choices for

her children is often beyond the control of the individual or family. The selection of goods and services available are influenced by many sectors including food producers, manufacturers, retailers, and the education, health care, and social safety systems (NSOHP, 2005). Policy decisions at all levels of government also influence the food options that are available (Butterfield, 1990). These higher levels of decision making influence what products are marketed and advertised in the media. Large corporations manipulate the cost, content and availability of foods that are damaging for people's health (Schlosser, 2001; Winson, 2004). Winson (2004) carried out a study to examine the way in which political economic factors intersect with diet and nutrition to determine adverse health outcomes. He conducted research on trade industry publications and collected data through onsite investigations of supermarket practices of the three largest Canadian retail supermarket operations. Winson concluded that the foods most heavily promoted, marketed, and prominently placed in the "foodscape" or institutional sites for the merchandising and consumption of foods, are those that yield the greatest margin of profit for these sites. In particular, these products include foods that are highly processed and "pseudo foods" or foods that are typically high in sugar and/or fat, and calories and low in nutrients. The types of foods that are made available, marketed, and advertised influence individuals' food preferences, food purchases, and children's food requests (Taylor, Evers & McKenna, 2005; Winson, 2004).

Food marketing. Food marketing, according to the Chronic Disease Prevention Alliance of Canada (CDPAC), encompasses many elements and platforms, "including but not limited to; food advertising, food pricing, product placement, merchandizing, labelling, branding, packaging, in-store displays, online advergames, branded toys and

clothing, sponsorship, character creation and celebrity endorsements" (CDPAC Policy Consensus Statement, March 28, 2008). In choosing foods, mothers must contend with the food requests of children who are the target of a multitude of television advertisements advertising empty calorie foods, fast foods, soft drinks, and sugared cereals. According to Horgen, Choate, and Brownell (2001), children are exposed to an estimated 10,000 advertisements for food each year. The majority, 95% of these, are for fast foods, candy, sugared cereal, and soft drinks. NcNeal (1992) contends that by pre-school age, children have become 'consumers by influence' in that they begin to have preferences for certain products. Campbell et al., (2006) interviewed a socio-economically diverse group of 16 mothers and one father who reported that their young children asked for food they saw advertised on the television or promoted on toys and gimmicks. An extensive systematic literature review carried out by Hastings et al. (2003) concluded that food advertisements promote food purchase requests by children to parents, influence children's preferences for products and brands, and affect consumption behaviour.

Nestle (2006) suggests that the most insidious purpose of marketing is to persuade children to eat foods made available "just for them", not what their parents eat. Nestle proposes that recent methods to market foods to children have become more intense and pervasive. According to Nestle, television still predominates, however, the balance appears to be shifting to product placements in toys, games, educational materials, songs, and movies; character licensing; and celebrity endorsements and to less visible or "stealth" campaigns that involve word of mouth, cellular-telephone text messages, and the internet. "All aim to teach children to recognize brands and pester

their parents to buy them" (Nestle, 2006, p.2528). Travers (1996) concluded that there is an onus on the individual to resist the temptations and decode the messages of the corporate sector that markets with a profit interest.

To determine the basis of how and why five year old children select foods, Carruth, Skinner, Moran and Coletta (2000) randomly selected 34 children from a longitudinal study of 72 children to take part in two in-home interviews where they were asked to select one food from nine pairs of familiar food. Concurrently and separately their mothers completed a consumer questionnaire regarding maternal food practices. The families selected represented middle and upper socio-economic status. Findings indicated that five year old children selected foods based on a single attribute of the product or the packaging, such as liked the product, liked the flavour, liked the character/action figure on the product, the toy or prize that came with the product, or the general appearance of the product. Findings suggest that parents need to understand the single attribute process that five year olds use to choose foods. This type of information might better enable parents to counteract marketing practices that arrange sugared cereals boxes and other junk foods at children's eye level knowing young children can recognize brands and can encourage their parent to purchase these items (Schwartz & Puhl, 2003; Taylor et al., 2005).

Summary

In summary, this synthesis of the literature highlights the extent to which various individual, interpersonal, organizational, community, and societal/policy level contextual factors influence the food choices that mothers are able to make for their young children. These factors include: children's food preferences and cultural influences, parenting

feeding practices, children's physical activity, gender, income, race, social class, literacy, education, the mother-child relationship, community features, and marketing practices.

Consistent with the gendered nature of feeding work, mothers bear the major responsibility for making food choices that promote their children's health, however many women are limited in the food choices they are able to make by a variety of physical, material, economic, and social restraints. As noted in this literature review, mothers' food parenting style, cultural context, income, level of literacy, and education influence the foods to which children are exposed and the foods that children will eat (Patrick et al., 2005; CPHI, 2004; McIntyre & Rondeau, 2009; IALSS, 2003; Ricciuto at al., 2006). Nova Scotia, with its high rate of female lone-parent families report higher levels of moderate to severe income-related food insecurity than the Canadian average. Mothers with low incomes who live in food insecure households are not able to afford healthy food choices for their children on a regular basis (Tarasuk et al., 2007). Mothers who are not able to read and interpret food labels, prices, cooking instructions, and general health-related information are more compromised in their ability to decide what food choices are the healthy choices (IALSS, 2003). These life conditions affect mothers' ability to make food choices for their children.

Interpersonal level factors are further emphasized in the cited studies exploring the motivations, practices, and beliefs shared by mothers when choosing foods for their preschool age children. These studies highlight the important role that the mother-child relationship plays in this process. The studies that were reviewed were mostly qualitative and used semi-structured individual interviews or focus groups to elicit mothers' perspectives regarding how they make food choices for their children. Many similar

findings were noted. All the cited studies describe the influence of children's preferences on the foods mothers selected for their children--if not for the main meal choices then as a reward food. Notably, most studies indicate that children's health is a major motivator for mothers' food choices and then highlight the inconsistencies between motivation and behaviour as mothers engaged in practices such as offering unhealthy foods to motivate their children's eating behaviours (Alderson & Ogden, 1999; McGarvey et al., 2006; Morton et al., 1999; Slater et al., 2011; Tucker et al., 2006). In addition, these studies describe the role that traditional and intergenerational influences play in the food choices mothers made for their preschoolers. Mothers tended to offer foods to their children that they themselves liked (Baughcum et al., 1998; Hoerr et al., 2005) and frequently looked to their own mothers for nutritional advice (Baughcum et al.; 1998; McGarvey et al., 2006) sometimes ignoring professional advice.

Community level factors draw attention to the extent to which features of the physical environment influence the foods mothers choose for their young children. Mothers are limited in the choices they can make in relation to the goods and services available to them (Williams, 2009; Winson, 2004). In addition, families living in physical environments that inhibit children's ability to play and be active (Dehghan et al., 2005) necessitate that mothers make allowances for their children's decreased levels of activity when making food choices that decrease their risk of becoming overweight or obese.

Societal or policy level factors underscore the influence that marketing practices and invasive marketing campaigns play in convincing children and possibly undiscerning parents to purchase their products (Nestle, 2006; Winson, 2004). These practices strongly influence the food choices made by the uncritical consumer. Other policies related to

food pricing and various social programs also contribute to mothers' ability to make preferred food choices for their children.

This overview of relevant literature provides many valuable insights into the multilevel factors and issues that challenge mothers in their attempt to make food choices for their preschool age children that protect and promote their health. Many factors from different levels of aggregation intersect to influence the choices mothers make in feeding their preschool age children. Notably absent in the literature was the process mothers used to make their food choices in the face of all these factors. This gap in the research is the focus of this study.

I used a constructivist grounded theory methodology to gain an understanding of the process that mothers used to make food choices for their preschool age children. Mothers were invited to explore and describe how contextual factors at multiple levels influenced their food choices for their preschool age children.

CHAPTER THREE: METHODOLOGY and METHODS

Researchers use qualitative research approaches to study how individuals and groups view and understand the world and construct meaning out of their experiences. These approaches involve an interpretive, naturalistic approach to the world (Denzin & Lincoln, 2005). In this study, I used constructivist grounded theory methodology to generate a theoretical rendering of the process of how CBRM mothers made food choices for their preschool aged children. This methodology was informed by a constructivist-interpretive paradigm or constructivism.

In the first section of this Chapter, I describe the ontological, epistemological, and axiological assumptions related to this paradigm, reflect on my own personal philosophical assumptions, and describe the constructivist grounded theory methodological approach that was used in this inquiry. In addition, I describe the suitability of constructivist grounded theory as a methodology for the study of health promotion phenomena and comment on the need for critical inquiry and reflexivity in constructivist grounded theory and in health promotion nursing research. Finally, I discuss the specific methods used in this inquiry including setting, participant selection, data collection and analysis, methods to enhance scientific integrity, ethical considerations, and study limitations.

Constructivist Paradigm of Inquiry

All qualitative researchers are philosophers in that universal sense that all human beings are guided by highly abstract principles (Bateson, 1972; Denzin & Lincoln, 2005). These principles unite the researcher's beliefs about the nature of reality, termed ontology; epistemology, the relationship between the inquirer and the known; values or

axiology, and methodology, the process of gathering knowledge about what exists in the world (Denzin & Lincoln, 2005). These ontological, epistemological, axiological, and methodological beliefs that mould how the qualitative researcher perceives the world and performs in it may be termed a paradigm (Denzin & Lincoln, 2005). A paradigm is generally defined as a worldview or a set of beliefs that guides action; an interpretive framework that recognizes all research as interpretive, reflecting the beliefs, feelings, and worldviews of the researcher (Guba & Lincoln, 2005).

All paradigms are based on a set of assumptions that help to shape the form and the purpose of an inquiry and to provide the lens through which data collection and analysis proceeds and through which the results of the study are viewed and interpreted (Ford-Gilboe, Campbell & Berman, 1995). The following ontological, epistemological, and axiological assumptions are consistent with the constructivism paradigm.

Ontology represents beliefs about the nature of reality and the nature of human beings in the world. Constructivist ontology denies the existence of an objective reality assuming a relativist ontological position (Guba & Lincoln, 2005). A relativist position asserts that reality exists as multiple, sometimes conflicting, mental constructions of daily life experiences that are situation and context dependent (Ford-Gilboe et al., 1995). Socially constructed, these realities are ungoverned by universal laws; they are local and specific, dependent for their form and for their content on the persons who hold them (Guba, 1990). Reality is a construction that is made by human beings (Charmaz, 2000).

Epistemology represents the philosophical assumptions and beliefs about the nature of knowing, of what can be known, and who can be the knower (Milliken & Schreiber, 2001). Epistemology addresses the nature of the relationship between the

researcher and the people being researched (Creswell, 2007). Epistemologically, constructivism assumes a subjective and close relationship between the researcher and the participant where the viewer and the viewed mutually create knowledge (Charmaz, 2000; Creswell, 2007). Researchers are considered part of the research process within a constructivist paradigm and not objective observers. Their values must be recognized by themselves and by their readers as an inevitable part of the outcome (Mills, Bonne & Francis, 2006). A subjectivist epistemological view commits the researcher to a relationship of reciprocity with the participants in the co-construction of meaning and the development of a theory that is grounded in the participants' and the researcher's experience (Mills et al., 2006).

Axiological issues address the role of values in a study (Creswell, 2007). Holders of constructivist values, or axiology, claim that "propositional, transactional knowing is instrumentally valuable as a means to social emancipation, which is an end to itself, is intrinsically valuable" (Guba & Lincoln, 2005, p. 198). In this regard, empowerment is a function of the constructivist paradigm's axiomatic demands (Guba & Lincoln, 2005; Lincoln, 1992).

Situating Self: Personal Philosophical Assumptions

Qualitative researchers approach their studies by explicating the assumptions that guide their inquiries (Creswell, 2007). According to Mills et al. (2006), "Explicating the place from which the researcher starts provokes a need to reflect upon his or her underlying assumptions and heightens his or her awareness of listening to and analyzing participants' stories as openly as possible (p.9)."

My exploration and reflection of constructivism strengthens my conviction that as a nurse researcher I gravitate towards ontological relativistic, epistemologically subjectivist, and constructivist axiological philosophical assumptions. As a public health nurse, I developed a heightened understanding and appreciation of the interconnectedness or relativity between the capacity of individuals, families, and communities to experience health and the social and environmental context of their life situations. A relativistic ontology, or view of reality, asserts that multiple individual realities exist that are influenced by context (Mills et al., 2006); no one point of view is uniquely privileged above another. This view is congruent with my own belief about reality thus it has informed my research process. In carrying out this study, I provided all participants with the respect and open atmosphere necessary to encourage them to share their perspectives. I interviewed mothers of varying partnership status, socioeconomic background, race, educational level, and geographic location to ensure that a wide variety of perspectives would be heard. Thus, including multiple voices, views and visions of the lived experience (Charmaz, 2000) consistent with a constructivist position.

A subjectivist epistemological view emphasizes a close relationship between the researcher and participants in the co-creation of meaning (Mills et al., 2006). I believe in the necessity of a close, subjective, reciprocal, and non-judgmental stance in listening to and coming to understand people's lived experiences. I acknowledge that as the nurse researcher I was a part of this research process, not an observer. I recognize that the grounded theory produced from this endeavour was a co-construction between me as the researcher and the participants.

Constructivist values, or axiology, stress empowerment as an important element. As a nurse researcher I adhere to emancipatory values. I value acting in a way that promotes and increases human autonomy. To this end, I used inquiry methods that attempted to promote both participant and researcher empowerment. I facilitated extended engagement and dialogue with participants and, as previously noted, a sharing of status and power, and the valuing of multiple view points (Lewis, 1996). According to Lincoln (1992), this type of engagement where individuals are invited to express what is important in their lives for their own health--where multiple voices, views, and visions or constructions of the lived experience are collected and weighed for their sophistication and information level creates a relationship between the researcher and the participants that is mutually empowering.

In summary, I used constructivist grounded theory as the methodology to guide this inquiry. My personal and professional values as well as my relativistic and subjectivist assumptions were reflected and supported in this methodology. In using this approach I acknowledged the existence of multiple social realities influenced by context, the co-creation of knowledge by the researcher and the participants, and the intended empowerment of participants aiming towards interpretive understanding of the participants' perspectives (Charmaz, 2002; Mills et al., 2006). In the following section I describe and discuss this methodological approach. First I will locate this approach within the different grounded theory approaches.

Grounded Theory Approaches: Choosing the Appropriate One

Grounded theory is a prominent and evolving qualitative research methodology (Morse, 2001). It is complete with its own set of procedures, techniques, and assumptions

that seek to explore and describe the social processes occurring within human interactions (Mills et al., 2006; Walker & Myrick, 2006). There are notably three dominant versions of grounded theory; an original or classic version developed by Barney G. Glaser, and Anselm L. Strauss (Glaser & Straus, 1967; Glaser, 1992) and a subsequent version developed by the late Anselm Strauss, with his more recent coauthor, Juliet Corbin (Strauss & Corbin, 1990, 1998). A third and more modern version of grounded theory is described by Charmaz (2000, 2006). These different versions or approaches to grounded theory reflect particular ontological, epistemological, and methodological assumptions and paradigms of inquiry (Annells, 1997).

The original or classical approach to grounded theory (Glaser & Strauss, 1967) is often placed in the positivist or post positivist paradigm (Annells, 1997; Charmaz, 2005; McCann & Clark, 2003). This paradigmatic position is noted in Glaser's insistence that the classic mode focuses on concepts of reality, searching for true meaning, and looking for what is in the data, not what might be (Annells, 1997; Charmaz, 2000). The grounded theory approach of Strauss and Corbin (1990, 1998) has been linked with the positivist, post-positivist, and constructivist paradigms (Charmaz, 2000; Mills et al., 2006). Charmaz argues that Strauss and Corbin's version remains imbued with positivism and with objectivist underpinnings; that their positions assume an external reality through their analytical questions, hypotheses, and methodological applications. Mills et al. (2006) acknowledge that Strauss and Corbin's work "demonstrates a mixture of language that vacillates between post positivism and constructivism, with a reliance on terms such as *recognizing bias* and *maintaining objectivity* when describing the position the researcher should assume in relation to the participants and the data" (p.3).

Constructivist Grounded Theory

A more recent approach to grounded theory is the constructivist version put forth by Charmaz (2000, 2002, and 2006). Charmaz plainly situates her version of grounded theory in the constructivist paradigm. Consistent with the constructivist paradigm, Charmaz' grounded theory is ontologically relativistic and epistemologically subjectivistic. Her constructivist grounded theory approach explicitly assumes that research participants' implicit meanings, experiential views, and researcher's finished grounded theories are an interpretive portrayal of the studied world; a construction of reality. In doing constructivist grounded theory the researcher creates the data and ensuing analysis with the participant and reality arises from the interactive process and its temporal, cultural, and structural contexts; "constructivists aim to include multiple voices, views, and visions in their rendering of the lived experience" (Charmaz, 2000, p. 525).

Charmaz (2006) directs constructivist grounded theorists to take a reflexive stance towards the research process and give serious consideration towards how their theories evolve, recognizing that both the researcher and the participants interpret meanings and actions. In being reflexive the researcher recognizes alternative ways of viewing reality, making explicit their own particular world views in the research endeavour (Eakin, Robertson, Poland, Coburn, & Edwards, 1996; Fontana, 2004). Constructivist grounded theorists see facts and values as linked, they acknowledge that what they see or do not see rests on values and accept that analysis is contextually situated in time, place, culture, and situation (Charmaz, 2006). Charmaz (2000, 2002, & 2006) espouses that data and theories are not discovered; that one constructs grounded theories through one's

involvement and interactions with people, perspectives and research practices. She states that her approach to grounded theory builds upon a symbolic interactionist theoretical perspective with constructive methods. Grounded theory as a research methodology emerged from, and is intrinsically tied to, the symbolic interactionist perspective of human behaviour and interaction (Annells, 1996; Berg, 2001; Charmaz, 2000, 2002, & 2006; Chenitz & Swanson, 1986). In light of this I provide a brief overview of this philosophical perspective.

Symbolic Interactionism

Symbolic interactionism is a noted, theoretical perspective that describes and explains the relationship between individuals and society, as mediated by symbolic communication (Milliken & Schreiber, 2001). It is an approach to the study of human life that focuses on the meanings of events to people in natural or everyday settings (Chenitz & Swanson, 1986). Herbert Blumer (1969) is considered the founder of symbolic interactionism and is noted to have coined the term symbolic interaction. Symbolic interaction, according to Blumer, rests on three basic premises. Firstly, that individuals will act towards things on the basis of the meanings they hold for these things. Secondly, that the meanings of such things are derived from social interaction with others. Lastly, that these meanings are dealt with and modified through an interpretive process the individual uses when s/he encounters them in their environment.

Symbolic interactionists posit that the concept of self is unique to individuals; that "the human ability to hold a concept of self and for self interaction is the basis for the formulation of meaning and experience in the world" (Chenitz & Swanson, 1986, p. 5). The notion of symbols is noted to be intrinsic within Blumer's (1969) premises,

proposing that people behave and interact based on how they interpret or give meaning to specific symbols in their lives. Humans create meanings for objects based upon their internal dialogue and their interactions with others (Milliken & Schreiber, 2001). Language is considered the most symbolic system among symbolic interactionists (Sarantakos, 1993); "communication and a common language for communication provide the mechanisms for meaning to be shared" (Chenitz & Swanson, 1986, p.6).

Within the symbolic interactionist perspective, the researcher describes social behaviour as it takes place in natural settings noting social rules, ideologies, and events that illustrate shared meanings held by people within an interaction and how this affects their behaviour (Chenitz & Swanson, 1986). The researcher strives to discover the underlying meaning that motivates human behaviour (Milliken & Schreiber, 2001). The researcher is required to understand the world from the participant's perspective. S/he "must be both a participant in the world and an observer of the participants in that world--the researcher, as observer, must translate the meaning derived from the researcher as participant into the language of the research discipline" (Chenitz & Swanson, p. 7).

Symbolic interactionism is inherent in grounded theory research, as Milliken and Schreiber (2001) add, "whether the researcher is aware of it or not" (p.188). Milliken and Schreiber conclude that for the grounded theory researcher to develop a parsimonious theory that describes and explains the actions and interactions of participants as they manage basic social processes, s/he must engage in symbolic interaction within themselves, with the participants, with the data, and with the constructed theory. According to Charmaz (2002) "a constructivist approach to grounded theory

complements symbolic interactionism because both emphasize the study of how action and meaning are constructed" (p.687).

Using a Constructivist Grounded Theory in Health Promotion Research

In this section, I will discuss the suitability of constructivist grounded theory as a methodology to study health promotion inquiries. In starting, I will briefly comment on the use of a constructivist paradigm in health promotion research.

"If we are to be "at the table" of the community, the constructivist paradigm is essential to success" (Lewis, 1996, p.451). The field of health promotion has been reframed in the post-Ottawa Charter era (Labonte & Robertson, 1996). In this reframed, post modern version, reality is viewed as a historical, cultural, and gendered social construction where no single truth exists, only multiple socially constructed realities (Young, 2002). Truth is understood as the best informed and most sophisticated truth one might construct at any given moment (Labonte & Robertson, 1996). According to Lewis (1996), recognizing social life as constructed and contextualized obligates the researcher to understand this constructed reality. This may only be accomplished through the close, subjective, epistemological and ontological stance of the constructivist paradigm.

Constructivist grounded theory methodology, informed by a socio-environmental health promotion perspective, is an appropriate methodology for the study of a health promotion phenomenon (MacDonald, 2001), such as how mothers make food choices for their preschool age children. Implicit in the socio-environmental health promotion perspective is a socio-ecological construct of health that recognizes the influence of both individual and interpersonal factors and larger structural economic, organizational, social, cultural, and political factors in determining health (Green et al., 1996; MacDonald,

2001; McLeroy et al., 1988; McMurray, 2007; Sallis & Owen, 1997). The use of constructivist grounded theory methodology enhances the capacity of the researcher to integrate structural level social environmental conditions and individual level influences on human action and interaction; particularly, the meaning making and symbolizing that individuals engage in during their daily lives (MacDonald, 2001).

To aid in the exploration of the structural elements that shape and condition the situation being studied and to engage the researcher in the type of critical inquiry necessary to address invisible aspects of social structure and process, Charmaz (2006) suggests as a possible strategy the use of the conditional/consequential matrix (Strauss & Corbin, 1990, 1998) as an analytical device to aid the researcher to think beyond micro social structures and immediate interactions to macro social conditions and consequences. In this study I referred to the conditional matrix (Corbin & Strauss, 2008; Strauss & Corbin, 1998) to enhance my thinking about relationships between individual and structural conditions both to each other and to process. As suggested by Walker and Myrick (2006) the matrix provided a lens to enhance my view of the phenomenon under study. According to MacDonald (2001), as a tool it can provide the analyst with the theoretical sensitivity necessary to uncover the unspoken and the unacknowledged. Similar to the socio-ecological perspective; the micro lens permitted the conditions or consequences that existed within individual, group, and family to be explored and the far away, macro lens permitted the viewing within the community or national level.

As noted and discussed in Chapter One, the concept of empowerment is the philosophical core and one of the central strategies in the Ottawa Charter's definition of health promotion (WHO, 1986). Empowerment may be defined as the process whereby

individuals, communities, and populations gain power, knowledge, skills, or resources that allow them to achieve positive change (Labonte, 1993; Rodwell, 1996). Health is significantly affected by the extent to which one feels mastery, control or power over one's life (Robertson & Minkler, 1994). To address and respond to the health promotion strategy of empowerment, a health promotion inquiry researcher must be able to explore issues of power. According to Cook (2005), the empowerment values implicit within health promotion require that the researcher use methods that can facilitate action among those affected while at the same time providing convincing evidence to those in decision making positions.

Charmaz (2000) states that within a constructivist grounded theory methodology, extant concepts such as power may be treated as sensitising concepts to be explored in the field. From this perspective the researcher can define if, when, how, to what extent, and under what conditions these concepts become relevant to the study. Grounded theory procedures force the researcher to question how conditions such as gender, social class, or power influence the phenomenon being studied (Strauss & Corbin, 1998b).

According to Charmaz (2006):

> The logical extension of the constructivist approach means learning how, when and to what extent the studied experience is embedded in larger and often hidden positions, networks, situations, and relations. Subsequently, differences and distinctions between people become visible as well as hierarchies of power, communication, and opportunity that maintain and perpetuate such differences and distinctions (pp. 130-131).

Charmaz contends that it is incumbent on each researcher to define how, when, and to what extent participants construct and enact power, privilege and inequality. In this study, guiding interests or sensitising concepts (Blumer,1969) inherent in the socio-environmental health promotion perspective, such as equity and power or empowerment, sensitised me to ask questions that allowed mothers to discuss the contextual constraints they experienced when making food choices. It is important to stress that these sensitising concepts were used to assist me in asking questions and approaching the data with greater consideration of the potential issues influencing mothers' food choice. Sensitising concepts were not used to force a preconceived framework onto the data.

Constructivist Grounded Theory and Health Promotion Nursing Research

The call to critical inquiry inherent in a socio-environmental health promotion research approach is also an important prerequisite for nursing research. According to Raphael (2000), critical knowledge in health promotion research is concerned with uncovering the role that health harming societal structures and power relations play in promoting inequalities and disenabling people. Nursing inquiry must reflect nursing's primary responsibilities, which are actions that will lead to improved health for the collective (society) and individuals (Browne, 2000). To advance this emancipatory goal, inquiry must integrate a critical focus (Browne). Critical awareness has the potential to promote both individual and collective autonomy and responsibility (Lutz et al., 1997). Crotty (1998) asserts that "inquiry spawned by the critical spirit" (p.157) commits the researcher to interrogating commonly held values and assumptions, challenging conventional social structures, and engaging in social action. Contextualizing the phenomenon under study by addressing the historical, economic, political, and social

forces working to sustain it is a fundamental process within socio-environmental health promotion research and emancipatory nursing research.

The researcher, using constructivist grounded theory (Charmaz, 2006), supports the goal of empowerment by adopting a reflexive posture towards knowledge and the research process. The researcher as research instrument strives for an understanding of the social world of participants through reflexivity. The researcher does not occupy a privileged position outside of the social reality being studied but instead enters into a collaborative, non-hierarchical relationship of reciprocity with participants where meaning and power is mutually negotiated (Fontana, 2004; Lather, 1991). In a sharing of status and power, the researcher values and respects each individual's capacity to create knowledge regarding their own experiences and their ability to identify solutions from problems arising from these experiences (Fontana, 2004; Lewis, 1996; Robertson, 1998).

According to Fontana (2004), "the critical lens must be turned inward to ensure that participants and researchers are involved in a partnership as co-researchers in which the study becomes an instrument of liberation and not a means of conformity" (p.98). All critical inquiry is emancipatory in its intent as participants are viewed as active agents who have the potential to become empowered to understand and change their situation (Fontana, 2004; Lutz et al., 1997; Mohammed, 2006). Charmaz (2006) contends that when people tell their stories, they often gain insights into their actions, their situations, and the events that shape them.

Constructivist grounded theory is a methodological approach that is suitable for the study of health promotion phenomena. Moreover, this methodology is conducive to contributing towards the emancipatory goals of a socio-environmental health promotion

nursing inquiry. According to Charmaz (2005), a constructivist grounded theory informed by critical inquiry demands going deeper into the phenomenon itself and its situated location in the world. It encourages the researcher to examine the broader social, political, economic, and environmental factors that contribute to health thus broadening the generation of knowledge that contributes to meaningful understandings and explanations of human interaction in the social world. Its use enhances the capacity of the researcher to promote emancipatory social change that can improve health (Kushner & Morrow, 2003; Ray, 1992).

In summary, in using constructivist grounded theory and a socio-environmental health promotion perspective, I enabled participants to describe their world in relation to how they made food choices for their children. I provided mothers the opportunity to explore how issues of class, gender, race, and power or powerlessness influenced their ability to provide food choices for children, to think about and speak about oppressive social structures and conditions that hindered their ability, and to consider potential individual and or collective actions that could improve their ability to make food choices to enhance their children's health.

Methods

Grounded theory methods describe the steps of the research process and offer a path through it (Charmaz, 2006). These methods provide a set of systematic inductive guidelines that assist the researcher to study social and social psychological processes, to direct data collection, to manage data collection, and to develop an abstract theoretical framework that explains the studied process (Charmaz, 2002). Grounded theory strategies include: the simultaneous collection and analysis of data, data coding that follows a two

step coding process, the use of comparative methods, memo writing as part of the construction of conceptual analyses, sampling techniques that refine the investigator's emerging theoretical ideas, and integration of the theoretical framework (Charmaz, 2000).

The methods used in this study were those of the constructivist grounded theory approach described by Charmaz (2000, 2002, 2005, and 2006). Charmaz (2006) accepts the offer of Glaser and Strauss (1967) who invited researchers to use grounded theory strategies flexibly in their own way. Charmaz states "I accept their invitation and return to past grounded theory emphases on examining processes, making the study of action central, and creating abstract interpretive understandings of the data" (p.9).

Setting

This study was conducted within the CBRM. The CBRM is the second largest municipality in the Province of Nova Scotia. It is located on the eastern side of Cape Breton Island and covers a total area of 2,470 square kilometres. Over 1,900 kilometres of roadways cover the area, and there are around 43,000 homes. The coastline includes over 800 kilometres on the Atlantic Ocean and over 400 kilometres on the Bras d'Or Lakes. The CBRM was created by the provincial government on August 1, 1995. It was created by amalgamating the city of Sydney, the towns of Glace Bay, New Waterford, Sydney Mines, North Sydney, Dominion, Louisburg, and the rural areas of County Cape Breton (CBRM, 2008).

The CBRM is consistent with the overall cultural make up of Cape Breton Island that includes five main cultures: Scottish, Mi'kMaq, Acadian, Irish, and English. Other smaller cultural groups enticed to Industrial Cape Breton by the promise of work in the

coal mines and steel mills include Black Loyalists, Italians, and Eastern Europeans. The racial/ethnic composition of Cape Breton consists of 95.0% Caucasian, 3.6% Mi'kMaq (Canadian First Nation), 0.7% Black and 0.1% Arab. These people brought their own unique customs and foods, which remain an important part of the cultural landscape of Cape Breton to this day (CBRM, 2008; Feintuch & Samson, 2010; Wikipedia, 2011). Food has deep cultural connotations that shape food behaviour and choice (Lang, Barling & Caraher, 2009). Culture plays a significant role in what food choices are available, the cost of foods, general attitudes towards food, the meaning of food, and the way children are socialized towards food (Lang et al., 2009; Rozin, 2006). Similar to other cultures, people living in Cape Breton recognize food as a symbol of welcome and hospitality. Sharing food and drink with family, friends, and even strangers is an aspect of Cape Breton culture. Notably, with passing generations a portion of traditional food wisdom and culture may have faded or been reshaped by consumer society (Lang et al., 2009; Rozin, 2006)

The last reported total population for this area was 105,986, which included 4800 children between the ages of 0-4 years (Statistics Canada, 2007). The main industries include fishing, farming and tourism; there are a variety of service and trade sector jobs and several call-centres. Coal mining was a major industry until the last mine closed in 2001. According to Statistics Canada (2007), unemployment is high, at 15.9%. The median income for all private households is $41,257. The median income for female lone parent families was $24, 230. CBRM has the third highest rate (18.4%) of low income households within Nova Scotia (Statistics Canada, 2002a). Education levels are lower than the provincial average with almost 46 per cent not finishing grade 12. About 14.6

per cent of individuals have earned at least one university degree (Statistics Canada, 2002).

The high rate of unemployment, low income, and low education levels within Cape Breton correspond with a high incidence of chronic illness, disability, and premature death (Colman & Hayward, 2003). These authors report that Cape Breton has the highest age standardized mortality rate within the three Maritime Provinces as well as the highest death rate from circulatory disease and heart disease in the Maritimes, a rate 30% above the national average. Cape Breton has been recognized as having among the highest rates of adult obesity in Canada (Cape Breton District Health Authority [CBDHA], 2005a). Self reported heights and weights estimate that 57% of adults living in Cape Breton are above a healthy weight range with 35% reporting being overweight and 22% obese (CBDHA, 2005a). Specific information on childhood obesity in Cape Breton is not available. Cape Breton has the highest rate of high blood pressure in Atlantic Canada, 72% higher than the Canadian rate. In addition, Cape Breton has the highest death rates from cancer, 25% above the national average (Colman & Hayward). The overall life expectancy for the population of the CBDHA is the lowest among 54 health regions in Canada (CBDHA, 2005b).

Sampling

The goal of sampling in grounded theory is to develop a "rich, well-scoped grounded theory that has been verified through the process of saturation, is sensitive to the trajectory, stages, and phases of the phenomenon being studied, and has well described transitions" (Morse, 2007, p.243). The sample for this study included 18 participants. A total of 35 interviews were completed that included 18 initial interviews

and 17 follow-up interviews. Narrative data were collected through initial face-to-face interviews using a semi-structured interview guide. Morse (2001) suggests that to reach saturation in a grounded theory study 20-30 participants may be needed with two to three unstructured interviews per person. This number should be adjusted depending on a variety of factors (Charmaz, 2006; Morse, 2001). For instance, if the topic being studied is obvious and clear, the information is easily obtained in interviews, and the quality of data provided by the participants is rich and experiential, then fewer participants are required to reach saturation (Charmaz, 2006; Morse, 2001).The topic of how mothers make food choices for their children was a clear and obvious topic. Making food choices for their children was an activity in which these mothers engaged on a daily basis. They had a great deal of knowledge and experience from which to draw during each interview. The mothers who participated in this study were willing to share their stories and provided extensive and detailed data. For this study, 35 interviews with 18 participants was a sufficient number to build robust theoretical categories and thus reach saturation.

Consistent with grounded theory techniques, decisions for the theoretical collection of data occurred in two stages, initial sampling and theoretical sampling. In grounded theory, initial sampling is where you start whereas theoretical sampling directs you where to go (Charmaz, 2006).

Initial sampling for this study was purposeful; in that participants were sought who fit pre-established sampling criteria (Charmaz, 2006; Morse, 2007) and from different demographic and cultural backgrounds. Mothers of preschool children were purposely selected from a variety of settings that provided services to this age group. These settings included Public Health Services, the Family Place Resource Centre in

Sydney, and the Cape Breton University Early Childhood Centre in Sydney. Within the CBRM there are public health offices in Sydney Mines, Sydney, New Waterford, and Glace Bay. Public health nurses in these offices provide screening to all preschoolers that reside within the CBRM. The Family Place Resource Centre in Sydney offers a variety of community-based programs to help meet the educational and supportive needs of all families with children from birth to six years of age. All families may access these free programs and participants differ in their social and economic backgrounds. The Cape Breton University Early Childhood Centre in Sydney provides daycare to preschool children of students, faculty, and staff studying and working at Cape Breton University.

The data provided from initial interviews aided me in developing preliminary codes, categories and my emerging theory on how mothers made food choices for their young children. These findings guided my theoretical sampling. Theoretical sampling, according to Charmaz (2006), is a strategy used by researchers that involves seeking and collecting pertinent data to elaborate and refine the categories in the researcher's emerging theory. According to Charmaz, the researcher conducts theoretical sampling to develop the properties of her/his category or categories until no new properties emerge. Theoretical sampling helps researchers to fill out theoretical categories, discover variation within theoretical categories, and define gaps within and between categories (Charmaz, 2002).

During theoretical sampling, I purposefully selected women who could further develop, expand, and refine particular concepts, categories and the developing theory constructed from initial sampling. Theoretical sampling informed my interviewing with new participants and repeat interviews with mothers. During theoretical sampling I asked

more targeted questions to assist me in exploring concepts, uncovering linkages between categories, and refining and verifying the emerging theory. I used theoretical sampling to explore the variations in how mothers with different demographic and cultural backgrounds interacted with contextual realities to make food choices for their children. My initial sample included mothers from varied cultural and demographic backgrounds who lived below Statistics Canada Low Income Cut Off (LICO) rate. After I interviewed a sample of these mothers I decided to include mothers who lived above the LICO rate. According to Statistics Canada (2008), Low Income Cutoffs:

> Represent an income threshold where a family is likely to spend 20% more of its income on food, shelter and clothing than the average family, leaving less income available for other expenses such as health, education, transportation and recreation. LICO rates are calculated for families and communities of different sizes.

Women in this study who met the criteria for living below Statistics Canada LICO rates were described as women living below the LICO rate or women with incomes below the LICO rate.

Recruitment Strategies

Upon receiving ethical approval from the Dalhousie University School of Nursing Thesis Committee, the Dalhousie University Social Sciences and Humanities Human Research Ethics Board, and the CBDHA, I forwarded a Letter of Introduction (Appendix A) to the Directors of the aforementioned organizations. In this letter I outlined the purpose and nature of the study, I described the expectations of staff, and the potential benefits to these organizations from participating in this study. Following this

introductory letter, I met with the Director in person or by phone to discuss and expand on the information in the letter and to answer any questions or address any concerns. Once permission was received from the Director to proceed, and she informed her managers and staff of the same, I forwarded a Letter of Introduction (Appendix B) to the staff and met with the appropriate managers and staff to present an overview of the study and to discuss the expectations of staff regarding the recruitment of participants, answer all questions, and address any concerns. Family Place staff, Cape Breton University Early Childhood Centre staff, and public health nurses who offered to help recruit participants were provided further details of their role. I provided recruiters with a Letter of Introduction and Consent Form (Appendix C) to review with potential participants for their consideration. When a mother indicated an interest to participate in the study, the recruiter provided the mother with my name and contact information so that she could contact me. I arranged a face-to-face meeting with the mother at her convenience and choice of location. At that time I provided the mother with an Introductory Letter and Consent form (Appendix C). I reviewed the information and obtained signed consent. I informed each participant of the $25.00 stipend they would receive in appreciation for taking part in this study. In an attempt to minimize any cost to participants, I scheduled interviews at mother's convenience and desired location. As previously mentioned, the interview data I obtained during initial sampling helped me to develop preliminary codes, categories, and my emerging theory of the process mothers use to make food choices for their preschool age children. To incorporate theoretical sampling, as concepts and categories started to emerge during the analysis of data, I informed recruiters of

additional descriptive criteria to help in the selection of participants that could contribute to the testing and the refinement of the evolving theory.

My first participant was a single mother of three children who was living on social assistance. Her main concerns appeared to centre on not having enough money to make preferred food choices. I wondered if this was an issue specific to all mothers with low incomes and whether it would be a concern to mothers who earned higher incomes. I realized that I would have to select participants of different incomes to look at this early emerging finding.

Sample Profile

Eighteen mothers with children between the ages of three and five who did not have any dietary restrictions and represented different income levels, marital status, age, education level, rural and urban dwelling, participated in this study. Morse (2007) recommends initially selecting a demographically homogeneous sample such as low income mothers, once the phenomenon under study is understood, then moving to other contexts and groups to study the variations.

In keeping with Morse's (2007) recommendation, I started with a homogeneous sample of participants whose estimate of yearly family income, before taxes was below Statistics Canada's LICO rate. In total 10 mothers fit this group. These mothers ranged in age from 23 to 48 years, with an average age of 30. They had between one and three children. All mothers had one child between the ages of three and five years. During the interviews, mothers spoke about making food choices for the preschool age child in the home at present as well as how they made food choices for any older children when they were preschoolers. Seven mothers were single, two had common law partners and one

was married. Nine of the 10 mothers were unemployed and receiving social assistance benefits. One mother worked part time. All mothers had at least a grade 11 education, one had attended some community college and two had undergraduate degrees. Seven of these mothers described their cultural background as Canadian/Cape Bretoner. The oldest mother of this group was French Canadian. She was a single mother with less than high school education, who had moved to Cape Breton from Montreal four years earlier when she was pregnant with her youngest child. She also had a teenage daughter. One mother who had moved to Cape Breton a few years earlier described herself as from Halifax/Nova Scotian. One other mother living below the LICO rate was Mi'kmaq. She was a single mother with one child and was pursuing her second university degree.

Table 1

Demographic Profile of Mothers Living below Statistics Canada's LICO rate

AGE	CULTURAL BACKGROUND	PARTNER STATUS	EDUCATION LEVEL	EMPLOYMENT STATUS	FAMILY INCOME	NUMBER OF CHILDREN
29	Cape Bretoner Canadian	Common law	GED High school equivalency	Unemployed Social Assistance	$20-24,999	3 (1 child 3-5 yrs)
40	Cape Bretoner Canadian	Common law	1 year university	Unemployed	$25-29,999	3 (1 child 3-5 yrs)
23	Cape Bretoner Canadian	Single	Grade 11	Unemployed Social Assistance	Below $20,000	3 (1 child 3-5 yrs)
30	Cape Bretoner Canadian	Separated	Some university	Unemployed Social Assistance	Below $20,000	2 (1 child 3-5 yrs)
48	French Canadian (Montreal)	Single	Grade 11	Unemployed Social Assistance	Below $20,000	2 (1 child 3-5 yrs)
25	Cape Bretoner	Single	Grade 11	Unemployed Social Assistance	Below $20,000	3 (1 child 3-5 yrs)
26	Cape Bretoner	Single	Grade 11 & diploma	Unemployed Social Assistance	Below $20,000	2 (1 child 3-5 yrs)

AGE	CULTURAL BACKGROUND	PARTNER STATUS	EDUCATION LEVEL	EMPLOYMENT STATUS	FAMILY INCOME	NUMBER OF CHILDREN
34	Cape Bretoner Scottish	Single	Some College	Part Time	Below $20,000	2 (1 child 3-5 yrs)
23	Mi'kmaq	Single	Undergrad Degree	Student	Below $20,000	1
28	Haligonian	Married	Undergrad degree	Unemployed	20-24,999	3 (1 child 3-5 yrs)

All participants described common concerns, including lack of time to prepare healthy meals, child's preferences and requests for less healthy foods at home and in the grocery store, and parenting issues with trying to promote healthy foods. However, their most pressing concern centred on not having enough money to afford preferred, healthier food choices. This concern preoccupied most of their time and energy. These mothers described strategies for 'trying their hardest' to provide foods for their preschoolers that they considered healthy.

To add dimension to my emerging theory, once I believed I was hearing the same central concerns from these mothers who had incomes below the LICO rate I expanded my sample to include mothers who were above the LICO rate. Eight participants were above Statistics Canada LICO rate. These mothers ranged in age from 26 years to 40 years with an average age of 31 years. They had between one and three children, all mothers except one had one child between the ages of three-five years. One mother had twin, four year old daughters. All mothers had a minimum of high school education, one mother had attended some community college, five had completed undergraduate degrees and one mother had completed a graduate degree. Two of the mothers who had undergraduate degrees, and one mother who had some community college, were unemployed; one mother who was Mi'kmaq was presently a student working on a second undergraduate degree. Four of these mothers were working full time and one was

working part time. Six were married and two were in common law relationships. Seven participants described their cultural background as Canadian/Cape Bretoner. One mother was Mi'kmaq. One mother had been born and raised in rural Cape Breton but had lived in Asia for the last five years. She had married an Asian man and recently returned to Cape Breton with their four year old Asian born son.

Table 2

Demographic Profile of Mothers Living above Statistics Canada's LICO Rate

AGE	CULTURAL BACKGROUND	PARTNER STATUS	EDUCATION LEVEL	EMPLOYMENT STATUS	FAMILY INCOME	NUMBER OF CHILDREN
40	Cape Bretoner (Irish/French)	Married	Undergrad Degree	Full Time	Over 45,000	1
30	Cape Bretoner	Common law	High School	Part Time	30-34,999	2 (1 child 3-5 yrs)
27	Mi'kmaq	Common Law	Undergrad Degree	Student	20-24,999	1
34	Cape Bretoner (Italian/Matis/ Scottish)	Married	Undergrad Degree	Full Time	Over 45,000	2 (2 children 3-5 yrs)
29	Cape Bretoner	Married	Undergrad Degree	Full Time	Over 45,000	3 (1 child 3-5 yrs)
36	Cape Bretoner	Married	Masters Degree	Full Time	Over 45,000	1
26	Cape Bretoner	Married	Community College	Unemployed	$30-34,999	1
27	Cape Bretoner	Married	Undergrad degree	Unemployed	45,000 – Living off savings	1

Similar concerns described by mothers with incomes below LICO rates were described by these mothers. The main difference was that the financial constraints that preoccupied mothers who lived below the LICO rate were not an issue for these mothers. Many of the

higher income mothers shopped for bargains, but they felt the price of food did not deter them from buying foods that they wanted. One new concern emerged from mothers in this group. Mothers described conflict in dealing with well-intentioned extended family members and friends who wanted to give their children less healthy foods and snacks against the mother's wishes. In returning to mothers living below the LICO rate to check this finding I found that this was not a concern.

I continued sampling until during my coding and analyzing I found that no new properties were emerging and that my same properties were continually emerging as I went through the full extent of my data. At this point I believed that theoretical saturation of my categories was reached (Glaser & Strauss, 1967; Charmaz, 2006). Theoretical sampling is an essential element of grounded theory methodology (Charmaz, 2006). I believe that I upheld its directive to search for multiple perspectives and to hear the views of individuals with varying contextual realities. Starting with an initial sample of mothers living below the LICO rate, my theoretical sample consisted mainly of mothers with higher incomes. When these higher income mothers raised a new concern related to conflicting family food values, I interviewed additional mothers living below the LICO rate to ascertain if this was a concern for them that I might have missed. It was not.

An overview of the demographic profile of all participants is included in Table 3.

Table 3

Overall Demographic Profile

DEMOGRAPHIC N =18	**MEAN / RANGE**	
AGE	30.8yrs	23 – 48 yrs
NUMBER OF CHILDREN/ FAMILY	2	1-3
NUMBER OF PRESCHOOLERS/FAMILY	1	1-2

DEMOGRAPHIC N =18	NUMBER / %
CULTURAL BACKGROUND	
Cape Bretoner	14 (78%)
French Canadian	1 (5.5%)
Mi'kmaq	2 (11%)
Haligonian	1 (5.5%)
PARTNER STATUS	
Married	7 (39%)
Common Law	4 (22%)
Single	7 (39%)
EDUCATION LEVEL	
Less than high school	4 (22%)
High school graduate	2 (11%)
Some university/ college	3 (16.6%)
Community college graduate	1 (5.5%)
Undergraduate degree	7 (39%)
Graduate degree	1 (5.5%)
EMPLOYMENT STATUS	
Full time	4 (22%)
Part time	2 (11%)
Unemployed	10 (55.5%)
Student	2 (11%)
FAMILY INCOME	
Below LICO rate	10 (55.5%)
Above LICO rate	8 (44.4%)
GEOGRAPHICAL LOCATION	
City (Population 24,115)	7 (39%)
Town (Population 7-16,000)	7 (39%)
Rural (Population 2000)	4 (22%)

Data Collection

The primary source of data collection for this study was face-to-face, one on one, semi-structured interviews. Additional data were obtained through a follow up telephone or face-to-face interview. I made observations also in local grocery stores and restaurants that participants described in their interviews to obtain a clearer picture of the settings they described. Over the 16 month period of data collection, mothers whom I interviewed

brought to my attention issues such as child-focused product placement in grocery stores and increased pricing for products with cartoon or celebrity figures on packages. During my times in grocery stores I observed where products designed to attract children were placed and how they were priced. I observed back-to-school promotions designed to promote less expensive, less nutritious, food choices for children's lunches. One mother mentioned that she had gotten some lunch ideas for her preschoolers from these displays. I looked at flyers to see what foods were being promoted at given times. In restaurants I attended to menus and observed parents making food choices for their preschool age children. I recorded field notes based on my observations. These observations allowed me to create additional question probes to add to my interview. All field notes were considered data and were analysed using grounded theory methods.

In total, I completed 35 interviews with 18 participants including, 18 initial interviews and 17 follow-up interviews. I collected narrative data on all participants through initial face-to-face interviews using a semi-structured interview guide (see Appendix E). I permitted mothers to pick the time and location of their choice for the interview. Most mothers chose their own homes; some chose an agency setting such as the Family Place Resource Centre, or at a private room in their local library, or a private room at CBU. Two mothers were interviewed at their place of work.

Grounded theory data are best gathered in narrative form, over time, to enhance deeper exploration and the early identification of process and structure (Charmaz, 2005: Morse, 2001). In most cases, I met with mothers twice, spending in total approximately two hours with each mother. This period included time to meet one another and talk before the audio recorder was turned on and some time to talk after the recorder was

turned off. These off recorder discussions were captured in field notes and memos. The actual recorded portion of the initial face-to-face interview lasted on average about 45 minutes (30-60 minutes); typed transcripts of the interviews were prepared and mailed to participants to read and verify that the transcript accurately reflected what they said in the interview. In consideration of possible limited literacy levels, I asked mothers if they would prefer for me to call/visit to review their transcripts with them or for me to mail the typed transcripts to their home address. All mothers requested the typed transcript be sent to them. Following receipt of the transcript I conducted a follow-up recorded interview with 17 of the 18 original participants, which on average occurred one - two weeks following the first interview. One mother declined a second interview stating she could not find the time, although many time options were offered. Recorded portions of the face-to-face follow up interviews were generally around 15 minutes (5-20 minutes), and phone interviews were shorter than face-to-face interviews. Four mothers chose follow-up interviews by phone and 13 chose face-to-face interviews. During this interview mothers were invited to comment on the accuracy of their transcripts and to comment on the preliminary findings of my emerging categories. Mothers were invited to discuss and provide further examples of findings that could be used to modify and saturate my emerging theory. Data collected during follow up interviews were used to supplement data gathered from the initial narrative accounts. All interviews were audio recorded, transcribed, and analyzed following grounded theory methodology.

Following each interview, I recorded my observations and reflections of these conversations into field notes. I described details related to sight, sound, environment, and behaviours that were noted during the interview processes. I also recorded my

personal views, insights, interpretations, thoughts, feelings, and biases in relation to the interview process and the phenomenon being explored. Field notes enhance reflexivity; they can be crafted to make purposeful statements, ask questions, and tell about the self as well as the other (Warren, 2000). "In writing the other, we write the self" (Warren, 2000, p.196). Field notes and theoretical memos helped me to organize my data and highlight my emerging theory.

The interview. Grounded theorists use in-depth interviewing not to interrogate but to define and to explore social and social psychological processes (Charmaz, 2002). To conduct my interviews I used a semi-structured interview guide. Guiding interests or sensitising concepts from the socio-environmental health promotion perspective sensitised me to ask questions that encouraged the exploration by participants of how individual, interpersonal, organizational, community, and policy level contextual factors and various forms of power inherent in these contextual realities influenced their food choices. As I interacted with the data, and categories were co-constructed, I adjusted the range of interview questions or topics to gather more specific data to develop my theoretical framework. For example, each time a mother introduced a new topic or idea such as money, time, interpersonal conflict, or unique strategies. I added this insight to future interviews to see if it was common for other mothers. Data analysis began with the first interview. Grounded theory methodology requires that data collection, coding, and analysis occur concurrently (Charmaz, 2006).

Data Analysis

"The grounded theorist's analysis tells a story about people, social processes, and situations" (Charmaz, 2000, p.522). Composed by the researcher, the story reflects both

the viewer as well as the viewed (Charmaz, 2000). The socio-environmental health promotion perspective, symbolic interactionism, constructivism, and my background as a public health nurse provided me with a general set of sensitising concepts that informed my data analysis. As with data collection, these concepts sensitised me to ask particular types of questions so that I could expose the wide range of contextual factors and conditions that influenced mothers' food choices. In addition, my knowledge of these factors ensured that I was sensitive to issues of power, empowerment, and equity and looked for them in the data.

Grounded theory methodology requires that data collection, coding, and analysis occur concurrently (Glaser & Strauss, 1967). QSR International's NVivo 8 qualitative software was used to begin sorting and coding data. According to Morse (2007), computer programs in grounded theory assist in placing data in the best possible position to aid the researcher's cognitive work. The researcher, not the program, does the analysis.

In this study, I primarily followed the coding phases described by Charmaz (2000, 2002 and 2006). Charmaz (2002) refers to two main phases in grounded theory coding: an initial phase and a focused, selective phase. Theoretical coding follows the selective phase. Constant comparative analysis and questions generative of the analysis are used within each of these phases (Charmaz, 2002).

In the initial or open coding phase I read through each transcript and I asked questions of the data such as "what is happening in these data?" to identify fragments of data such as words, lines, segments, or incidents to determine their analytical significance. Grounded theory coding requires the researcher to pause and ask analytical questions about the data gathered (Glaser & Strauss, 1967; Charmaz, 2006).

I used NVivo 8 to highlight these data and apply codes, referred to in NVivo8 as free nodes. When possible I used gerunds as codes. Coding with gerunds is recommended as this helps one stay close to the data, to detect processes and to provide a sense of action and sequence (Charmaz, 2002; Glaser, 1978). Codes may also come from the language used by the participants. These are referred to as *in vivo* codes. For instance, one mother spoke about how she tried to be creative and make snacks more visually appealing for children. Using her words, I coded this "being creative". In total this initial analysis generated 184 codes.

Focused, selective coding is the second major phase in grounded theory coding. During the selective stage the researcher takes the most significant or frequently appearing initial codes to use in sorting and synthesizing larger segments of data (Charmaz, 2006). I used focused coding to develop categories. Common themes and patterns in several codes were subsumed into categories (Charmaz, 2006). For example a number of initial codes pertained to a variety of strategies or activities that particular mothers engaged in to better afford healthier food choices for their preschoolers. All these were grouped together as a focused code "Economizing". Other codes referred to strategies in which mothers engaged to make more time and be more prepared to make healthier food choices. These were grouped together under "Enhancing time and effort". Both of these focused codes were subsumed under the category "Managing Resources".

Theoretical coding as described by Charmaz (2006) is a sophisticated level of coding that specifies possible relationships between the categories developed during the selective phase of analysis. It is a process of coding that yields the conceptual relationship between categories and their properties (Glaser, 1978). Theoretical codes are

integrative, lending form to selective codes. They conceptualize how substantive codes are related and move the analytical story in a theoretical direction (Charmaz, 2006). For example the category "Managing Resources" referred to a previously described set of strategies that mothers used to counteract or moderate acknowledged contextual constraints. Two other categories, namely "Advancing Healthy Food Choices" and "Minimizing Societal Deterrents" also described different strategies that mothers used to moderate constraints. Three of these categories were subsumed under the major conceptual category, *Stretching Boundaries*.

During coding I referred to the coding paradigm developed by Strauss and Corbin (1990, 1998). This analytical tool was designed to assist analysts make connections between structure and process; to monitor the interplay and trace the connections between the context and situations in which a phenomenon occurs and the subsequent actions and interactions of the people in response to the phenomenon as they evolve over time (Strauss &Corbin, 1990, 1998). Using this tool permitted me to explore more closely the phenomenon of how mothers make food choices for their children and to make connections among categories. For instance, policy level factors such as food pricing in grocery stores affected the ability of mothers with incomes below the LICO rate to purchase healthy foods on a regular basis. This recognition directed me to further explore and describe the particular actions and interactions mothers enacted to respond to this phenomenon.

The categories constructed from selective coding helped to identify the core category and to link this with the other categories. A core variable may be a basic social process, a title given to the central categories that emerge when the researcher interacts

with her or his data (Charmaz, 2002; Charmaz, 2006). The basic social process (BSP) is the core category around which a grounded theory is developed. The core category that captured my overall understanding of how mothers were making food choices for their children was identified during this phase of research and named *Persistent Optimizing*. This core category was co-constructed through interacting with participants, my data, making comparisons, developing my categories, engaging in theoretical sampling, and integrating my analysis (Charmaz, 2005). Glaser (1978) describes basic social processes as "fundamental patterns in the organization of social behaviour as it occurs over time" (p. 106). Its conception as a theoretical construct is a product of the practice of grounded theory (Reed & Runquist, 2007).

Analyzing data using grounded theory methods is systematic; each phase of the analysis builds upon the next in developing a grounded theory (Swanson, 1986). It is a complicated process. As data are being analyzed, they must be ordered, recorded and stored in a manner that makes them retrievable and usable to the researcher. Methods used to accomplish this include coding data as previously described and memo writing (Corbin & Strauss, 2008).

Coding was accompanied by writing and sorting memos which assisted me in exposing the connections between categories, better defining sub categories and recognizing the core category. According to Charmaz (2006, p. 72), "memo writing provides a space to become actively engaged in your materials, to develop your ideas, and to fine tune your subsequent data gathering". I also used diagramming to better visualize and articulate the relationship between conceptual categories. I engaged in theoretical sampling, selecting participants who could contribute to the testing and the

refinement of the evolving theory. For example, my evolving theory began to develop during data collection and analysis from my initial sample of mothers who were living below the LICO rate. From here, to further develop and test this evolving theory I began to interview mothers with higher incomes. These mothers contributed to the theory development. Many of their concerns were similar to mothers living below the LICO rate. When these higher income mothers raised a new concern related to conflicting family food values, I interviewed additional mothers living below the LICO rate to ascertain if this was a concern for them that I might have missed. I also included as much variation in my sample as was possible. I noticed that most of the mothers I had interviewed had lived their whole lives in CBRM. I searched for mothers who had recently moved to the CBRM to add their voices to the developing theory.

Charmaz (2006) recommends that once the researcher has developed her/his categories and analysed the relationships between them; this is the time to return to the literature to begin locating one's work within the relevant sources. Once the core variable was identified I returned to the literature to discover how my findings related to the work of previous researchers.

Methods to Enhance Scientific Integrity during the Research Process

Credibility or trustworthiness in qualitative research relates to how vivid and true is the description of the phenomenon. It questions whether the "researcher has represented those multiple constructions adequately" (Lincoln & Guba, 1985, p.296) and whether participants would recognize the described experience or theory as their own (Beck, 1993). To evaluate grounded theory studies Charmaz (2006) proposes similar questions related to credibility (Has the researcher provided enough evidence to support

her/his claims?), originality (Do categories offer new insights; does the grounded theory challenge or extend current ideas?), resonance (Do the categories portray the fullness of the studied experience?), and usefulness (Does the analysis offer interpretations that people can use in their every day worlds?).

The credibility of an inquiry involves two aspects: first, carrying out the investigation in a way that believability is enhanced and, second, taking steps to demonstrate credibility (Lincoln & Guba, 1985). To enhance credibility, originality, resonance, and usefulness in this study I employed the following methods. I attempted to invest sufficient time during data collection to develop an in-depth understanding of the phenomenon under study. Data were collected over a period of 16 months from October, 2008 to February, 2010. To prolong my engagement with participants and with the data, I used follow up interviews to offer participants a forum for extended reflection, extended exploration, and dialogue regarding their ability to make healthy food choices for their preschool children. Prolonged engagement and involvement helps to build trust and rapport with participants (Lincoln & Guba, 1985). In addition, during the period of data collection, I spent time collecting observational data in grocery stores and eating establishments. These observations were recorded in field notes and provided additional data. In maintaining a relationship of reciprocity with participants, I conducted all interviews in an interactive, dialogic manner that permits self disclosure (Lather, 1991). Mothers appeared open and shared their stories, including their struggles, willingly. Chiovitti and Piran (2003) suggest additional methods for enhancing credibility in grounded theory methodology. To incorporate these methods, I attempted to ensure that participants guided the inquiry process. As information was provided by participants, I

modified the questions asked, and the content areas of the emerging theory, to reflect this information. For instance, during the first interview I did, the mother surprised me by telling me that she allowed her preschool age child to pick out the foods in the grocery store that she wanted to eat. I thought this might be a single finding, but I added it as a probe to my interview guide, only to discover this child-directed food purchasing existed to different extents among most of the mothers, regardless of education or income. I began to realize it appeared to be more related to the mother-child food parenting style, so I started probing more about this and its relationship to food choices for children. I used participant's actual words, such as *compromising* and *balancing* to name categories in the theory. According to Charmaz (2006), this helps to preserve participants' meanings of their views and actions at all levels of coding. Finally, as earlier indicated I articulated my personal views and insights about the phenomenon being explored through writing field notes with personal reflections.

Member checking is considered by Lincoln and Guba (1985) as the most crucial technique for establishing the credibility of qualitative data. Lincoln and Guba describe member checking as a technique "whereby data, analytic categories, interpretations, and conclusions are tested with members of those stake-holding groups from which the data were originally collected" (p.314). To evaluate credibility, resonance, and originality (Charmaz, 2006) I carried out member checking through follow up interviews with 17 of the 18 participants. Each participant was provided with a typed transcript of their interview. The one participant that did not do a follow up interview did receive the typed transcript of her first interview and was invited to share her thoughts. During the follow up interview, participants were invited to comment on the accuracy of their transcripts

and to discuss and confirm my preliminary findings and my emerging ideas. The views of all participants were included. Through initial and follow up interviews I invited participants to assist me to refine, develop, and revise my emerging theory.

In addition to credibility, dependability and confirmability are important criteria for establishing the trustworthiness of qualitative data (Lincoln & Guba, 1985). The dependability of qualitative data refers to the ability of data to remain stable over time and over conditions (Loiselle, Profetto-McGrath, Polit & Beck, 2004). Both the dependability and confirmability of data can be simultaneously established through an inquiry audit (Lincoln & Guba, 1985). Auditability in qualitative research refers to the ability of another researcher or interested party to follow the process by which the original investigator reached their conclusion (Morse, 1998). Examining the process used during the inquiry determines dependability while examining the product such as the data, reconstructions, and interpretations attests to the confirmability (Lincoln & Guba). To enhance auditability in this study I kept an audit trail outlining the conceptual development of my inquiry. I worked closely with my supervisors and committee members during each step of the research process. I engaged in debriefing with my supervisors and committee members, consulting with them on my interviewing, my transcripts, memos, field notes, my coding process, and my theory development. As recommended by Chiovitti and Piran (2003) to enhance the audibility in a grounded theory study, I describe the questions I applied to analyse the transcribed interview data, and I described how and why participants in the study were selected.

Transferability or fittingness is the final criterion suggested by Lincoln and Guba (1985) to help establish the trustworthiness of qualitative data. These authors describe

transferability as the extent to which findings from the data can be transferred to other settings or groups. To enhance transferability of data I have attempted to provide a rich, thorough description of the research sample, setting, the level of theory generated, and of all transactions and processes observed during the inquiry (Chiovitti and Piran, 2003; Lincoln & Guba, 1985). According to Loiselle, et al. (2004), "if there is to be transferability, the burden of proof rests with the researchers to provide sufficient information to permit judgements about contextual similarity." (p. 318)

The scientific integrity of grounded theory studies can also be enhanced by incorporating reflexivity (Charmaz, 2006; Hall & Callery, 2001).

Charmaz defines reflexivity as:

> The researcher's scrutiny of his or her research experience, decisions, and interpretations in ways that bring the researcher into the process and allow the reader to assess how and to what extent the researcher's interests, positions, and assumptions influenced inquiry. A reflexive stance informs how the researcher conducts his or her research, relates to the research participants, and represents them in written reports (pp. 188-189).

A reflexive stance requires that the researcher enter into a collaborative, non-hierarchical relationship of reciprocity with participants where meaning and power is mutually negotiated (Charmaz, 2005; Dowling, 2006; Lather, 1991). Labonte (2000) suggests that health promotion researchers exercise critical reflexivity on the nature of power possessed by people as professionals. I recognize that my past professional experience as a public health nurse, and my present position as a doctoral nursing student researcher and nurse educator, influenced my thinking and acting. I acknowledged the

necessity to be attentive to the power and privilege I carried with me as I engaged in this research process. To assist me in this process, when speaking with participants I carefully used language that was understandable to them. I avoided any types of jargon. I attended to the validity of each participant's statements respecting their capacity to create knowledge regarding their own experiences and their ability to identify solutions from problems arising from these experiences. I carefully maintained a non-coercive, non-hierarchical approach with all participants during my inquiry through scheduling interviews at the time and location of the participant's choice, conducting interviews in an interactive, respectful manner that encouraged participants' self disclosure, ensuring that participants were interactive during the inquiry process, and sharing and confirming with participants the researcher's understanding of the emerging categories. I also wrote field notes to provide descriptions of the sights, sounds, environment, or behaviours that were noted during the interview processes, and reflected on my personal views, insights, interpretations, thoughts, feelings and biases in relation to the research process and the phenomenon I explored.

Ethical Considerations

Ethical approval was obtained from Dalhousie University School of Nursing Thesis Committee, Dalhousie University Social Sciences and Humanities Human Research Ethics Board as well as the CBDHA. All procedures followed their ethical standards.

Three principles stand as moral standards for research involving human subjects. These include: respect for persons, beneficence, and justice (Christians, 2005). Respect for persons demands that participants enter the research project voluntarily and with

adequate information regarding all research procedures and possible consequences (Christians, 2005). I reviewed and explained both verbally and in writing the purpose and intent of this research process, the voluntary conditions of participant involvement, the benefits of participation, how privacy would be protected and all research procedures such as audio recording, time commitment, interviews expectations, and presentation of research findings. I encouraged participants to ask questions and attended to all concerns or issues addressed. Some participants asked questions such as what I planned to do with the information I obtained, no particular concerns or issues surfaced. Once I discerned that participants had adequate information regarding the research, comprehended the information, and had the power of free choice to voluntarily consent, decline, or stop participation in this study (Loiselle et al., 2004) I invited participants to provide signatures of their free and informed consent to participate in this study.

The principle of respect for persons also includes respect for their privacy and confidentiality. In this study I maintained participant privacy through all stages of the research process. Participants were identified by a code number to ensure that participants' names were not associated with their audio recordings, transcripts, or any future published or presented materials. I kept all written and recorded participant and researcher material in a private and locked location during the study and will continue to do so following the study for a period of five years as required by the Dalhousie University School of Nursing Thesis Committee and the Dalhousie University Social Sciences and Humanities Human Research Ethics Board.

The principle of beneficence commits the researcher to secure the well being of all participants (Christians, 2005). In research ethics the principle of beneficence imposes

a duty to maximize benefits to participants (Loiselle et al., 2004). Benefits from partaking in this study included the opportunity for mothers to discuss their ability to select healthy food choices for their children with the researcher and to increase their knowledge about themselves, other mothers, and ways to enhance their ability to make healthier food choices. I ensured that participants were aware that they may withdraw from the study at any time.

The last principle of justice insists on the fair distribution of both the benefits and burdens of research (Christians, 2005). All participants have the right to be treated with fairness and equity before, during, and after their participation in the research study (Loiselle et al., 2004). To ensure fair and equitable treatment I included participants from different income levels, marital status, age, race, education level, rural and urban dwelling to represent the wide variety of women living in Cape Breton. I honoured all agreements between myself as researcher and participants such as adhering to the procedures described in advance and the payment of any promised stipends. The one mother who did not complete the second interview was mailed the same stipend as all other participants.

CHAPTER FOUR: PERSISTENT OPTIMIZING

The findings for this study are described in Chapters Four, Five, and Six. In this Chapter, I present an overview of the basic social process of *Persistent Optimizing* and describe the major conceptual categories and sub-categories that make up this process. Following on this discussion, I present and describe the first major conceptual category, *Acknowledging Contextual Constraints* of the process of *Persistent Optimizing.* Using mothers' own voices, this conceptual category introduces the reader to the many and varied constraints that mothers acknowledge when making food choices for their children.

The goal of constructivist grounded theory research is to generate a theory or an abstract, analytical interpretation of participants' worlds and of the processes constituting how these worlds are constructed (Charmaz, 2005, 2006). Constructivist grounded theory methodology offers a systematic approach to analyzing interactions between human agency and social structures or conditions. The researcher co-constructs grounded theories through her/his involvement and interaction with people, perspectives, and research practices (Charmaz).

In this study, I have used a constructivist grounded theory methodology (Charmaz, 2000, 2002, 2005 & 2006) informed by symbolic interactionism as well as a socio-environmental health promotion perspective to generate a theoretical rendering of the process that influenced CBRM mothers' food choices for their preschool age children. The central problem that was revealed by the mothers in this study was negotiating numerous interpersonal, social, economic, and environmental constraints that limited their ability to make preferred, healthier food choices for their preschool age

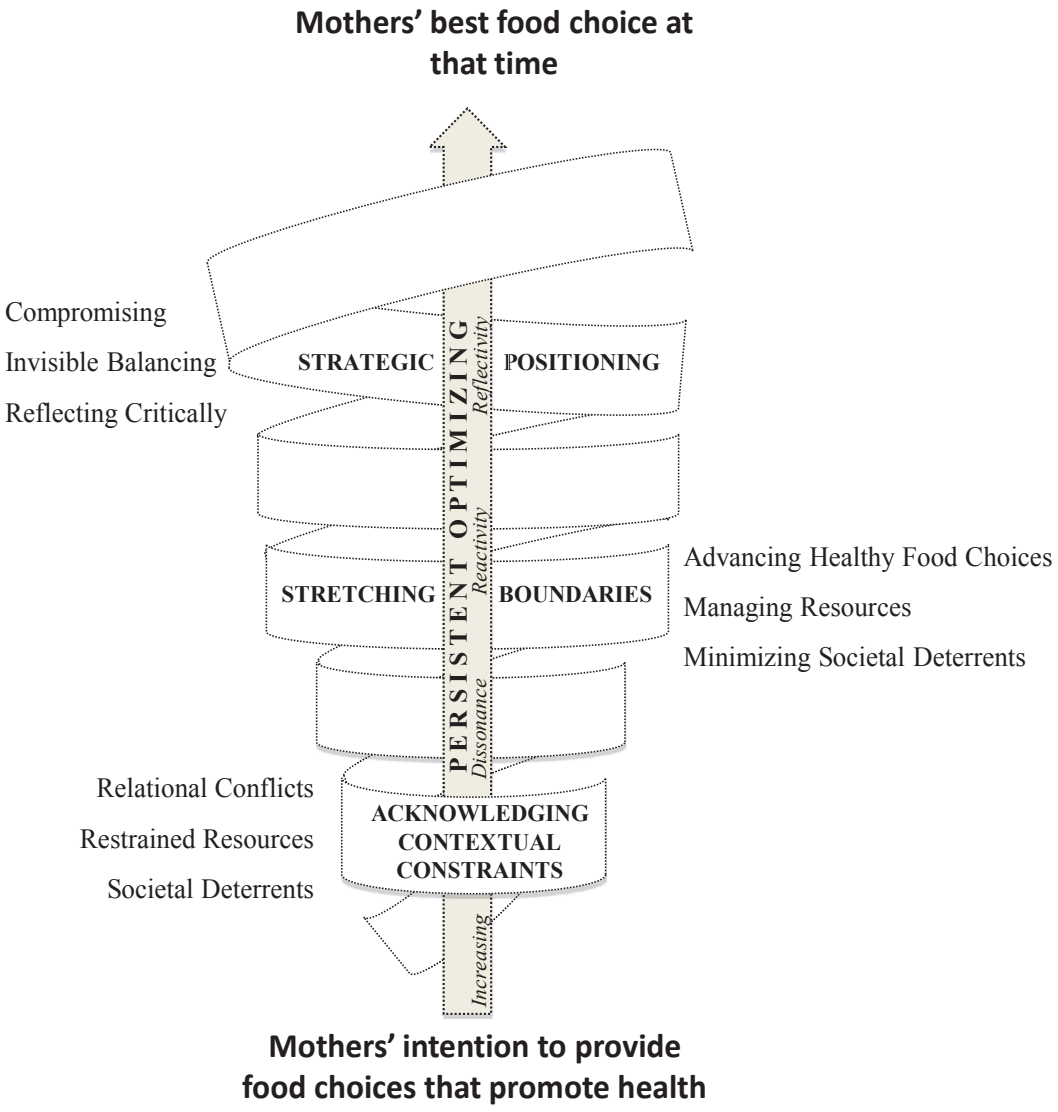
children. Mothers' ability to make food choices was embedded in the social practice of eating and as such, the food choice practices in which mothers engaged were directly influenced by the interplay of their personal agency and the broader social environmental structure (Delormier et al., 2009; Giddens, 1984). In this study, mothers' agency or their ability to choose particular foods for their children was conditioned and influenced by the social structures they encountered. The basic social process that mothers used to process this problem was named *Persistent Optimizing*.

Persistent Optimizing

Persistent Optimizing describes the multidimensional course of action that mothers took to get closer to their goal of providing their preferred food choices for their children on a more consistent basis. When faced with making food choices among a range of options mothers attempted to optimize their choice, or to make the best or optimal choice at that particular time. Optimizing may be defined as "to make something function at its best or most effective, to use something to its best advantage" (English Encarta Dictionary, 2007) "to find the best compromise among several often conflicting requirements" (Collins English Dictionary, 2009). Optimizing is a concept that has been used in decision making, generally in regard to business or organizational behaviour. Simon (1976) used the concept to describe selecting the course of action that is associated with the better outcome. He suggests that economic agents try to do as well as possible given constraints such as available information, available time, and the information-processing ability of the mind. Simon suggests that optimizing is in fact difficult to accomplish as people often become overwhelmed with the amount of information they need to process. Optimizing, as described by Simon is more in relation to making major

decisions that require time to think and decide. Given the frequency of food choice and the complexities with which mothers contend when making choices for others, optimizing as used in this study, refers to mothers' persistent efforts at particular times and over time to make the best choice in a conflicted food environment where choice was constrained by a variety of individual, interpersonal, social, and environmental factors and conditions. These factors and conditions often worked in opposition, competing with mothers' intentions and ability, and their personal agency to make their preferred, healthier food choices. In response to these multiple constraining factors mothers persisted. They continued steadily or obstinately despite problems, difficulties, or obstacles to do their best, their optimum, to do all that they could, to make more consistently the choices they considered best for their children. *Persistent Optimizing* consisted of three main integrated, conceptual categories constructed from the data. They included: *Acknowledging Contextual Constraints*, *Stretching Boundaries,* and *Strategic Positioning*. The central process of *Persistent Optimizing* is depicted in Figure 1.

Figure 1. Persistent Optimizing Graphic Representation



Overview of Persistent Optimizing

As reflected in Figure 1, the *Persistent Optimizing* graphic representation depicts a spiral that denotes the forward motion, or persistent movement of mothers to make their preferred, healthier food choices for their children. Mothers entered the spiral with the intention to make food choices that promoted their children's health. They moved

through the three main conceptual categories (a) *Acknowledging Conceptual Constraints*, (b) *Stretching Boundaries,* and (c) *Strategic Positioning* to help them reach this goal. The categories, although depicted separately, were interactive and related to one another. *Persistent Optimizing* was not a sequential process describing an orderly depiction of how mothers chose one food over another for their preschool age children. *Persistent Optimizing* describes a somewhat messy, more complex process of how mothers negotiated and dealt with a variety of competing constraints to make the best, generally healthier, food choice they could for their child in a given situation. Mothers' success at each conceptual category helped propel her towards making the best food choice possible in a given situation. Generally mothers progressed in a forward direction towards their goal, but they could also slip down the spiral and begin the ascent again. The spiral represents the building of mothers' awareness, knowledge, successful strategizing, and their subsequent agency to procure preferred food choices on a more consistent basis.

The initial category of *Persistent Optimizing* was named *Acknowledging Contextual Constraints*. In this category mothers set out to make food choices consistent with their feeding goals for their children. All mothers expressed that their overall intention was to provide healthy food choices for their children. In attempting to do so, they became increasingly aware of and acknowledged various competing contextual constraints at multiple levels of influence that hindered their ability to make their intended, healthier food choices. This category was associated with feelings of dissonance. In particular, mothers acknowledged (a) *Relational Conflicts* with their child, their partner, extended family, and friends; secondly, mothers acknowledged (b) *Restrained Resources* in relation to money, time, and cooking ability; and lastly, mothers

acknowledged (c) *Societal Deterrents* in the form of various counterproductive food marketing practices.

The second major category was *Stretching Boundaries*. *Stretching Boundaries* was characterized by increasing levels of reaction or reactivity by mothers. Reacting to the dissonance they experienced in *Acknowledging Contextual Constraints* mothers purposefully constructed and employed a series of moderating strategies to moderate or lessen the impact of these constraints. Moderating strategies used by mothers to stretch the boundaries of their capacity to make healthy food choices for their children were subsumed under the sub categories of (a) *Advancing Healthy Food Choices* (b) *Managing Resources: Mothers' Income, Time, Ability, and Effort,* and (c) *Minimizing Societal Deterrents.* In *Advancing Healthy Food Choices* mothers creatively prepared foods and diversions that encouraged their children to eat healthier foods, they regulated food rewards and treats and they found ways to reconcile conflicting food values of family and friends. In *Managing Resources: Mother's Income, Time, Ability and Effort,* mothers economized to stretch their food dollar and strategized to make the most of their time and energy related to the work of feeding their children. In *Minimising Societal Deterrents* mothers found ways to negotiate counterproductive food marketing practices to purchase healthier foods for their children on a more consistent basis.

The third major conceptual category was *Strategic Positioning.* Once mothers exhausted their use of moderating strategies in *Stretching Boundaries* they were left with making their food choices from the options available to them. In *Strategic Positioning,* mothers demonstrated increasing levels of reflection or reflectivity. They reflected on the success of the moderating strategies they had used, and in response, they constructed and

enacted optimizing strategies to position them closer to making the best or optimal food choice in a given food situation. Optimizing strategies included (a) *Compromising,* (b) *Invisible Balancing,* and *(*c) *Reflecting Critically*. Mothers generally had to make compromises among the food options available. In *Compromising* mothers had to consider their children's needs and wants; their income, time, energy, and keeping peace in the family. To counteract compromised food choices that were inconsistent with their feeding goals mothers immediately started thinking and preparing for future food choices that would balance out their child's health over a period of time. In *Invisible Balancing* mothers stayed alert and prepared so that if an optimal food choice or situation presented itself they would be able to take advantage of it. Mothers used resources wisely to find ways to acquire and present healthier food options to their preschoolers. Mothers looked at the big picture to ensure that over a particular period of time children's healthier food options outweighed the less healthy ones. Finally, in *Reflecting Critically* some mothers were able to examine their situation through a broader, more critical lens. Taking a futuristic view, these mothers planned for their children's future health; they wanted to teach healthy eating habits to their children that would endure into the future. Possessing a higher level of literacy and/or income from their family of origin, mothers recreated themselves, opting for different food choices for their children than the ones they were given as children. Some mothers recognized a need to learn more about feeding issues so that they could do their best to provide age appropriate, healthy foods for their children on a more consistent basis.

The strategies that mothers used in *Persistent Optimizing* to make food choices in any given situation were influenced and conditioned by the constraints they identified at

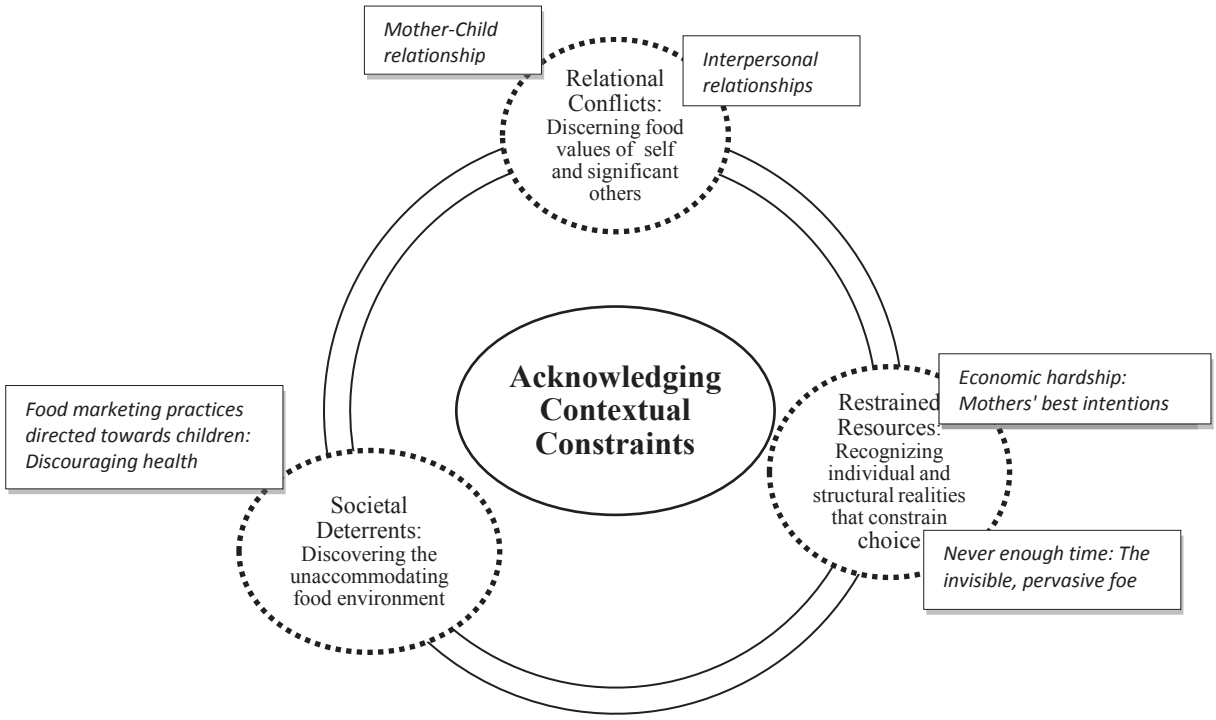
any given point and their agency to counteract these constraints. Mothers were not always successful at making their preferred food choice in every situation but they persisted, choice-by-choice, day-by-day, even week-by-week to increase their ability to make their preferred food choices. Mother's agency was influenced contextually by her life circumstances; the amount of money, time, and energy she possessed at any one time was prone to change as were the contextual constraints mothers encountered. Therefore, no one set of strategies were exclusively successful; mothers generally had to revise and refine old strategies, develop new strategies, and often had to use strategies in layers; such as, following moderating strategies with compromising strategies and following compromising strategies with strategies to balance their child's health. In developing and utilizing this variety of strategies mothers developed new knowledge and skills in negotiating various constraints that enhanced their agency to make preferred food choices.

This overview of *Persistent Optimizing* brings into focus that choice was an illusion for the mothers in this study. Mothers set out with the intention to buy preferred, healthier food choices for their preschool children, but many factors and conditions constrained their ability to attain these choices. Mothers experienced and responded to increasing levels of dissonance in *Acknowledging Contextual Constraints*, followed by increasing levels of reactivity in *Stretching Boundaries,* and reflectivity in *Strategic Optimizing,* as they strove to make their preferred food choice less of an illusion and more of a reality.

Acknowledging Contextual Constraints

The first major conceptual category of the process of *Persistent Optimizing* was *Acknowledging Contextual Constraints*.

Figure 2. Acknowledging Contextual Constraints



Acknowledging Contextual Constraints as depicted above in Figure 2 was characterized by mothers' recognition and acknowledgment of multiple, competing contextual or socio-environmental factors or conditions that constrained their ability to make their preferred food choices for their preschool age children on a consistent basis. In fact, mothers readily discredited any notion that they were free to make their preferred food choice in all instances. This realization prompted feelings of discomfort or dissonance. Festinger (1957) termed this type of uncomfortable feeling that is caused by holding two conflicting ideas as cognitive dissonance. Cognitive dissonance is common when making

choices. According to Festinger, dissonance increases depending on how important the issue is to the person involved, the degree of conflict between the dissonant thoughts, and one's ability to rationalize or explain the conflict. *Acknowledging Contextual Constraints* was characterized by mothers' acknowledgement of the constraining factors and conditions that were preventing them from making their preferred, healthier food choices for their children.

The following section describes the micro level contextual conditions that existed within individual, group, and family and the macro level conditions within the community or society that mothers acknowledged as constraints. Acknowledged constraints were subsumed under three sub categories: (a) *Relational Conflicts: Discerning Food Values of Self and Significant Others*, (b) *Restrained Resources: Recognizing Individual and Structural Realities that Constrain Choice*, and (c) *Societal Deterrents: Discovering the Unaccommodating Food Environment*. I will describe these sub categories and their ensuing properties in detail.

Relational Conflicts: Discerning Food Values of Self and Significant Others

A significant component of contextuality involves the setting of the interaction, the actors that are present and the communication between them (Giddens, 1984). In this study, relational conflicts refer to the tensions that sometimes occurred when mothers' preferred food choices for their children contrasted or competed with the food values of significant others. Mothers sometimes felt their own food values were being vetoed by their children and undermined or questioned by well-meaning partners, extended family, and friends. Mothers, to varying degrees, acknowledged these relational conflicts as constraining factors that negatively affected their ability to make preferred, healthier food

choices for their children. Feeding, like other aspects of caring work, is always embedded in a relation between people (Waerness, 1984). In this study the significant others that interacted with mothers when making food choices involved first and foremost her children; other interpersonal relationships included the children's father, extended family, and friends. Each of these relationships will be further discussed below under (a) *The mother-child relationship* and (b) *Interpersonal relationships*

The mother-child relationship. Particular to this study, mothers were not viewed in isolation, the mother-child relationship was central. Mothers were asked to describe how they made food choices for their preschool age children, so in this sense, mothers' responses were linked to that of their children. It was apparent that both mothers and the increasingly independent, preschoolers had agency when it came to food choice. The mother might be the one who purchased and prepared the food, but it was the child who decided whether or not to eat it. Essential components of the mother-child feeding relationship were (a) *Mothers' primary feeding goals* (b) *Children's food preferences*, and (c) *Mothers' food parenting practices.*

Mothers' primary feeding goals. Mothers in this study clearly expressed that they wanted their children to be healthy. For most mothers, this appeared to mean they wanted their children not to be ill, to be active and to have energy, not to be overweight or underweight in their estimation – to have a healthy appearance. Mothers stated that their children's health was the most important consideration when they made food choices. They believed that healthy foods were important to keeping their children healthy. Collectively, health and providing healthy food choices was their priority; individually, mothers varied greatly on their understanding of health and what constituted healthy or

healthier food choices. For some mothers, irrespective of demographic differences, permitting less healthy food choices was more acceptable than for others. In general, mothers tended to consider fruits, vegetables, milk, bread, and some form of meat as healthy food choices for their preschoolers. Mothers recognized empty calorie foods, take out, foods high in sugar or fat, and processed foods as less healthy food choices for them. For the majority of mothers their primary feeding goals tended towards varying degrees of liberality or tolerance regarding the amount of less healthy foods, and treats they were okay with giving their children. The degree of liberalness that mothers permitted tended to be associated with a variety of factors. Mothers who expressed limited knowledge regarding appropriate childhood nutritional guidelines, and those whose own food choices were admittedly poor, tended to be more accepting of offering less healthy foods.

Mother #7, was a married, Caucasian woman with a preschooler and an 18 month old child. She had a high school education, worked part-time, and had a family income above Statistics Canada's LICO rate. Mother #7 demonstrated some confusion concerning appropriate eating habits for her preschool age child. She commented that her four and a half year old son tended to go all day and most of the night with a Sippy cup filled with chocolate milk. The child drank so much of this milk that he was seldom interested in foods.

> (Mother #7) He tends to eat a lot of toast – he likes toast with jam or grilled cheese sandwiches. He kind of goes with that a lot – He's on a waffle kick now. It's only been in the last little while that he's been eating the way he's been eating. He's always been the type that he'll go around with milk, chocolate milk preferably in his cup and he'd go around all day – all he'd want would be

chocolate milk. Too busy to sit down to eat – it's hard to get him to sit down. But about two weeks ago we decided – we took the Sippy cup away from him and we took it off the baby. The baby didn't fare very well – he went back on it. Since we took [4 ½ year old] off the Sippy cup – the appetite is unbelievable – he asks for food. Normally before you'd be like come on its supper time – you've got to come and eat. Now he'll say "mom, I'm hungry" and he'll want food.

Interestingly, it was after I arranged this interview to talk to this mother about feeding her children that she decided to take the Sippy cup away from her child. I wonder if knowing that she was going to be talking with me about feeding her children had anything to do with her decision. In our follow-up interview I probed a little more about this situation asking if she had been concerned that her child was getting up to four and a half years and still using the Sippy cup and not eating well? She said she was concerned so I asked if she had spoken to her doctor or anyone about it. She replied:

(Mother #7) No I didn't. I just figured we'd take it when we thought he was ready. We didn't have a problem when we took it. He adapted very well to it – I wish we had taken it a little bit sooner – he probably would have been ok- you know- but.

In addition, this mother described having poor eating habits herself. She claimed that before she had children, she and her husband ate out at fast food restaurants every evening. Now they tried to limit their eating out to two to three times a week. In her own way, this mother felt she was making responsible changes based on her own life style that would benefit her children. Mother #7 commented,

(Mother #7) We try not to give him too much with sugar or anything too fatty. We try not to eat out too much. Stuff like that – I want him to be somewhat healthy. I mean he likes his fruit and vegetables – so – he's fairly easy in that way to keep – he'll eat the vegetables – he'll eat the fruit. I try not to have too much junk in the house because he will go to it sometimes if it's there – like the chips and the cookies.

Mother #9 also expressed concern over the amount of unhealthy food she permitted her preschool age child to have. Mother # 9 was a 26 year old, Caucasian, single mother with an income below the LICO rate and a grade 11 education. She had a five year old and a six month old baby.

(Mother #9) She's very fussy – poutine, pizza, French fries, she is more for fast food, she doesn't eat a lot of fruit and vegetables... she likes quick stuff like Mr. Noodles and Kraft Dinner and stuff like that – she's not big on eating meat

(Mother #9) Friday nights we have a slumber party – the three of us, well the baby doesn't eat anything. But we watch a movie and we get a bunch of junk food - and usually we will make something - like we will make shortbread or peanut butter cookies or something like that. We would make something first, then watch movies and eat a bunch of junk food.

In addition, mothers in this study who believed that pleasing their children was an important feeding goal tended to offer less healthy foods as requested by the child. For some mothers, particularly ones that felt they were deprived of treats as children, pleasing their children and providing them with treats was an important feeding goal. Mother #3 was a 23 year old Caucasian, single mother with three children whose income was below

the LICO rate. This mother stated that getting her children to eat healthy foods was important and she worked hard to make this happen. However, even while making healthier choices for her children overall, mother #3 maintained that it was important for her children to have some treats, having been deprived of them herself as a child.

> (Mother #3) Well I like to have a little bit of a treat because I know how it is to grow up and not been able to taste any of the junk food. Because the way my parents were I was lucky to get like $2 a month to go buy something. Then if they're being good I like to have a little bit of a treat in the house.

She thought that permitting some amount of unhealthy foods was fine for her children.

> (Mother #3) Well it depends – everything is in moderation is what I've learned. Like if you have nothing but junk food all the time – it will affect your health but if you're just eating a tiny bit every couple of days or whenever you can afford to get it for them then it's not really going to hurt them if they're not overloading themselves with it.

On further discussion, while recognizing that treats such as pop may be harmful and trying to limit treats mother #3 stated:

> (Mother #3) They get a tiny bit of pop but not much because I know what it does to the teeth because I can see what it does. And chips, they'll get like for treats sometimes that will be what they'll have in the afternoon time or if I'm sitting down having a little snack at bed lunch they might have a couple of chips - but like I try not to give them too much of the junk food.

It would appear that although mother # 3 expressed concerns regarding giving what in her mind would be "too many treats" she felt okay with providing a "bit of pop

and some chips" on most days. Interestingly, even though she was aware that soft drinks had harmed her child's teeth she still felt it was fine to offer. Overall, this mother like, others in the study, were aware of what constituted healthier food choices, but also wanted to please their children by giving them treats. For these mothers, some less healthy foods were acceptable.

On the other side of the continuum were mothers who tended towards more restrictive primary feeding goals. They believed that their children's health was best promoted by more seriously restricting or limiting unhealthy foods. Many of these mothers tended to be married, better educated, Caucasian women with higher earning professional jobs, although some were not.

Mother #18 was married to an Asian man. Originally from Cape Breton, this Caucasian mother had just moved back from Asia with her husband and their 4 year old Asian born son. This mother had an undergraduate degree; she and her husband were both looking for work. Her views on children's health were strongly influenced by her husband's culture that emphasized "wellbeing." She stated that in Asia healthy eating and activity were an important part of life. Her husband did much of the food preparation as they attempted to stay with Asian dishes.

> (Mother # 18) If he wants to be a good student, healthy and active then I have to think about what I'm putting in his body ... if he eats a lot of junk food and then he becomes overweight, he's going to be depressed, tired and he's not going to study well. All those things and he's going to have maybe low self-esteem and people could tease him or something.

Mothers who were authoritarian or stricter about what their children ate tended to emphasize how much work was involved in limiting less healthy food. A 27 year old, Mi'kmaq woman with an undergraduate degree, who lived with her common law partner, felt that healthy food choices were important if you wanted your child to be healthy.

> (Mother # 12) It's work; it's a lot of work. You have to think about what you're doing, you're nurturing a child and that's what you feed her. You have to be very careful to feed her healthy and promote good food choices because she could grow into an unhealthy child, obese, or anorexic.

Similarly, a 29 year old, Caucasian mother of three, employed as an elementary school teacher described trying to make healthy food choices on a consistent basis as a battle.

> (Mother #14) It is a battle, that's what it feels like, a battle. It would be easy to have them eat healthy if it wasn't that they were bombarded with other choices like junk. But they are; so.

This mother seemed aware that her food choices for her children were stricter than others. In discussing how she made food choices. She remarked,

> (Mother #14) I probably do limit theirs more so than your average person - from what I see, the unhealthy stuff. I have a bit of an issue around food. Myself, I don't mind eating it but I hate to see them have it. Like, I would never give then the full bar and that type of thing; I would make sure that I halved it.

Mother #14 expressed concern regarding her oldest child starting school the following year. She was concerned that her child would trade lunches with other children and not eat what she put in his lunch bag. Having control over her child's food choices was very important to her. She commented,

(Mother #14) I have a bit of an issue with them soon going to school. It's just because I see it all the time how they trade recesses and that kind of stuff. So hopefully he will eat what's in his lunch... it's not even the wanting so much just that he won't be eating what I gave him. I've always had that control of what he eats, but anyway I'm sure he'll be fine.

This mother also struggled with keeping control over her children's food choices when they were around other children.

(Mother #14) It's hard too, when there are other kids around because if they have it and typically like I said we're not terrible. If they're having a treat then I will let them have it, but if another one comes out and another one. But it's so hard because the other kids are eating it and I'm saying: "No, you've had enough".

When asked what would make it easier for mother #14 to make the food choices that she would like to be able to make she replied, " If everyone would listen and the kids would eat healthy." Mother #11, a single, university educated, Mi'kmaq mother whose income was below Statistics Canada LICO rate shared similarities with mother #14 in her desire to have control over her child's food choices. When asked about how it feels to make food choices for her child she stated:

(Mother #11) It feels like I'm in control. Like I'm in control of what I'm going to eat in the household and what my kid is going to eat in the household and whatnot... I have to buy healthy food because of my kid. So instead of me thinking about myself I think about him before I buy food.

Although she acknowledged her own inability to avoid items such as pop, she had different feeding goals for her child.

(Mother #11) Because I was so addicted to it [pop]; I know what it was doing for me. I always wanted it and it got me mad and it wasn't good for me or my teeth because I'm always going to the dentist and stuff. It wasn't a healthy drink to drink for my kid... I didn't want him to drink it and he's still not drinking it.

Mother # 15, a 36 year old, married, Caucasian woman with a graduate degree also was strict around permitting unhealthy foods. This mother described her husband as being more health conscious than she was, between them they felt they were succeeding in mostly making good food choices.

(Mother #15) He [husband] might even go more to the extreme opposite where she might ask for cookie and I'd say "okay you can have one cookie now but that's it until after supper" where *dad* would probably say "no cookies". So he is a little more extreme on the other end.

Finally, mother # 6, a married, Caucasian nurse was also vigilant regarding her child's access to unhealthy foods. When asked about giving snacks or treats to her child she described limiting these foods to events like parties.

(Mother #6) Funny, we were at a friend's place the other day and they gave her chips and she said to them, "I am not allowed to have these, its only at birthday parties" so if there is a party, that's where the treats would be given out and she would have it then, but it's not a regular thing. She thinks that treats are a cut up pineapple, or grapes and stuff…that kind of treats.

In summary, all mothers, from those with the most liberal feeding goals to those with the most restrictive feeding goals valued to varying degrees, providing food choices that promoted their children's health. Mothers expressed varying ideas of what

combination of food choices constituted a healthy or a healthy enough diet. Although some mothers permitted less healthy foods, they still experienced dissonance when they felt their children were not eating what they considered the right amount of healthy foods, such as fruit, vegetables, and milk. These mothers continued, on some level to work towards this goal, as they believed these foods would help their children be healthier. Mothers who were more restrictive in their regulation of less healthy food choices tended to experience greater levels of conflict or dissonance. They described feeling like "the bad guy" for regularly insisting that their children's access to junk foods be limited. These mothers described the need to be vigilant at all times to limit their children's access to less healthy foods.

Children's food preferences. Mothers in this study were well aware that their children had preferences when it came to getting them to eat. Mothers described their children as being attracted generally to foods that were high in sugar, fat, and salt. Children tended to request foods they liked, which often were not the most nutritious. As mother # 3 stated in reference to her five year old son, "If I let him decide it wouldn't be very good food. Well it would taste good but it wouldn't be very healthy." According to all the mothers in the study, almost all children if given the chance would request junk food and foods higher in sugar, fat, and salt and low in fibre over healthier choices. This food preference made the goal of providing food choices that promoted health more difficult to obtain. To illustrate, a 25 year old, single, Caucasian mother of three with a low income and grade 11 education stated,

> (Mother #8) Yes, well they always ask for greasy foods like chicken fingers or chicken nuggets and they like them cooked in the deep fryer and I say, " let`s put

them in the oven cause there better for you" and they say no put them in the deep fryer because its quicker - they know too much.

In general, the mothers commonly referred to their children as good eaters in that they accepted a wide selection of foods, or fussy eaters in that they refused many foods. Mothers with the most liberal to the most restrictive feeding goals were able to feed their children a wider selection of healthier foods if their children were good eaters. However, most children were described as somewhat fussy, not wanting to eat certain fruits, vegetables, or red meat. A few children were described as very fussy not wanting to eat anything healthy, preferring processed foods, and foods high in sugar, fat and salt. In describing foods her child preferred for lunch Mother #9 stated "She will only drink Kool Aide Jammers, so I have to make sure I have them. She takes crispers, the Bear Paws – I have to have them, Rice Crispies squares, um, Dunkaroos." Notably the fussy eater presented a greater challenge for every mother regardless of their primary feeding goals. Overall, children's preferences for less nutritious foods was a constraint that mothers acknowledged and which made their job of trying to promote healthy food choices all the more challenging.

Mothers' food parenting practices. As previously noted in Chapter Two, parents generally display one of three types of food parenting practices; permissive, authoritative, and authoritarian (Birch & Fisher, 1995). Consistent with this finding, mothers in this study displayed food parenting practices that exhibited these characteristics. Demographic differences did not appear to dictate the practices. Mothers with liberal feeding goals and mothers with restrictive feeding goals demonstrated all three practices.

Mothers in this study who exhibited food parenting practices that might be described as permissive had greater difficulty in controlling their children's food choices. They were not comfortable in saying "no" to their children. A single, Caucasian mother of three young children whose income was below the LICO rate almost sounded like a victim:

> (Mother #8) It's hard sometimes because you don`t know what to make or they are on a day when two of them want something different and it's like –"Why do you do this to me?" And then it's hard trying to figure out what to have with everything – because sometimes one doesn`t like those little Sidekicks and one loves those.

A married, Caucasian mother of two with a professional job demonstrated similar concerns:

> (Mother #13) Most times they do get what they want. I don't refuse them much. They're pretty spoiled... Well they are pretty particular because there are times that I've made three meals for them just to see if they would eat something. They are fussy too because they will tell me "yes, I want that" and I will make it and then "I don't want that". So, you can either be mad, or let them starve, or you can cook something else.

In contrast, mothers who exhibited authoritative food parenting practices demonstrated more of a partnership with their children around food issues, although these mothers still seemed to have the greater say. In these types of partnership the child's input was encouraged and acted upon but mother seemed to have the ability to steer children towards healthy choices – not whatever the child asked for. In more authoritative food parenting practices mothers involved their children in the decision.

(Mother #6) Now, I offer her the same foods, but sometimes she will turn her nose up at it but it is not a big deal, and I will let her go with it and we will just go on and eat stuff and she will mess around with it and later on at her snack I will give her something to eat. But we don't have a full head on head "that you're eating this and this is what's for supper". And if I know that it might be something that is a bit different, like the chicken a la king didn't look good to her, like you could tell that it was a bit much for her. I'll offer her something else maybe just the plain chicken and rice without the sauce on it.

Lastly, some mothers described themselves as being stricter or more authoritarian around food choices and eating meals. Generally, this strictness appeared to be partly traditional and for some mothers a way to ensure food was eaten and not wasted. These mothers tended to exercise their authority in getting the child to eat preferred food choices. This type of active encouragement would take some effort on mothers' part.

(Mother #4) "Yes, well I was taught from a very young age you eat what is put in front of you or you don't eat at all- because even back then- I mean I'm only 30 but even back then money is always tight and with the cost of everything going up - what's on the plate is what you're going to eat.

(Mother #12) Yes. Even though she doesn't like it there are times when there is stew. Stew meat, potatoes, turnips, carrots and stuff. I'll mash it up and she'll sit there and cry and say I'm not hungry, I am not hungry, and so okay then go in the corner and she's crying and crying in the corner and I'm not giving in because I want her to have this meal. Then she will go okay. And I will go are you going to

eat? No. Then get back in that corner. She does come back and she does eat all the meal and then I am satisfied because I know she has vegetables in her.

In summary, children's preference towards energy dense, less healthy food choices was a constraint that every mother in this study worked against. As mother #2 noted "kids are not about nutrition." All mothers, to varying degrees, wanted their children to eat healthier, less processed and less refined foods. Mothers who were the most liberal in their feeding goals and demonstrated permissive food parenting practices had children who consumed greater amounts of less healthy foods. Mothers whose feeding goals were more restrictive often had healthier food choices in their home. So even if they permitted the child to have what s/he asked for the child tended to get a greater share of healthier foods.

Interpersonal relationships. Mothers in this study described relational conflicts with partners, extended family, and friends when making food choices for their children. For some mothers, in particular those with less liberal and restrictive feeding goals, their efforts to provide their children with healthy food choices were sometimes negated by their partners, extended family, or friends who had differing views on what children should be permitted to eat. Significant interpersonal relationships identified by mothers include (a) *Father's role*, (b) *Grandparent and extended family influence*, and (c) *Friends with different views*. These will be discussed below.

Father's role. Some mothers in this study described how their efforts to promote healthier food choices for their children were undermined by their partner's views on child feeding. In most cases it was the mother who appeared to be the one to take on the main responsibility of getting their children to eat healthy foods. Mother #17 who was

Caucasian and married with three young children stated, “He leaves it mainly to me. He would definitely be more to give them pop and snack food. As far as eating healthy that comes from my pushing.”

Mother #12 who was an educated Mi’kmaq mother who had finished a first degree and was working on a second described herself as having a low income. This mother noted,

> (Mother #12) And the challenge is her father… Sometimes it’s a joke between them. Go ahead and let her have it... Last night she wouldn’t eat her supper so I said okay nothing else. But she did have something like the yogurt and milk or something. In the evening she was bumming for cookies and I said “no, you didn’t eat supper”. She said I’m hungry, I’m starving. “No, go to bed”. Her father gave her cookies and she went to her bed and said bye mom, goodnight. She was trying to hide the cookies, but I saw them.

Similarly, mother #14, an educated, Caucasian woman with a professional job and restrictive feeding goals commented,

> (Mother #14) He [child’s father] will probably be more apt to give them what they want than I would be. Or more junk food. I would try to limit that and that wouldn’t bother him to give them a couple of treats that day where I would have an issue with that. So if I’m not there I’m sure they get more of what they want without much of a fight... he would give them the whole bar we are just different that way. He wouldn’t see an issue with that where I would have a problem with that.

Grandparents' and extended family influence. In addition to partner conflict, mothers also spoke about the challenges of dealing with well meaning, extended family members whose views on giving junk foods were different from mothers. The mothers who discussed this were Caucasian, educated women with professional careers. Mothers who were living below the LICO rate did not note this problem.

> (Mother #6) Even my sister; for example, when my sister picks up my daughter at daycare I have to remind my sister that whatever you feed her at five o'clock is what she's going to have for her supper. So if it's one of those sweet cereal bars or a package of Smarties, that is supper and she doesn't have any room in her belly for an appetizer. My sister tends to do that. She will give them that and then be totally perplexed at supper.

This full time employed, Caucasian mother whose child visited her grandparents regularly noted similar challenges.

> (Mother #13) She [mother- in-law] is a huge influence on their life and she kind of takes over. She hadn't seen them in a week so she wanted to pick them up the other night and when she came home she didn't just have a treat of a chocolate bar for them, she had bought them six bars. I was like they don't need that, but she's so influencing that way.

Friends with different views. In addition, mothers mentioned that it was difficult to encourage healthy eating for their children when visiting friends. As above, mothers described being made to feel like the bad guy.

> (Mother #6)Yes, there is a lot of pressure in society to give kids treats and stuff like that... like when we go to friends of my husband's… and they are in their 50s

> and their kids are grown and as soon as we get there they haul out the Cheesies and the this and the that and then they give her a bag of stuff to go home with… Like junk food, and they will talk and say. That so and so won't give their kid this and so and so won't give their kid that. You kind of feel from the conversation that you are being pressured into letting them give her this garbage ... that you are the mean person because you won't let her have all of those things.

In summary, mothers who experienced these types of interpersonal conflict described it as frustrating, something that caused additional stress for themselves and their families. These mothers felt they were positioned as the bad guy for trying to do the right thing. They were the ones working the hardest to promote their children's health by making, what were seen by many, as the unpopular choices. These mothers had feeding goals that were more towards the restrictive side of the continuum. They experienced more dissonance because they took greater responsibility for ensuring that their children did not eat a lot of unhealthy foods.

Some of the fathers seemed to want to make the popular, but less healthy choices, giving their children what they asked for. It might be that fathers felt it was appropriate to indulge their children, knowing their wives were working on keeping them healthy. In contrast, two mothers in this study described their husbands as being more health conscious and stricter regarding their children's food choices than they were. Both these fathers had come from homes where good nutritional health was highly valued. These two mothers supported the father's desire for healthy foods and did not feel this was a source of conflict.

Restrained Resources: Recognizing Individual and Structural Realities that Constrain Choice

Money and time were the resources most in demand by mothers in this study when trying to make food choices that promoted their children's health. Money and time will be discussed below under (a) *Economic hardship: Mothers' best intentions thwarted* and (b) *Never enough time: The invisible, pervasive foe*.

Economic hardship: Mothers' best intentions thwarted. Economic insecurity was an enduring hardship for the mothers in this study who lived below Statistics Canada LICO rate. These mothers frequently described not having enough money to make preferred food choices for their children. Mothers living below the LICO rate who had more restrictive feeding goals experienced more episodes of dissonance as they desired to promote greater amounts of healthier foods. However, mothers with the most liberal feeding goals also experienced dissonance when the healthier food choices they wanted to make were priced out of range.

Mothers with family incomes above the LICO rate still discussed the price of food and generally shopped for bargains, but believed they had greater ability than mothers with incomes below the LICO rate to purchase healthier, more expensive foods if they chose. Mothers with incomes below the LICO rate were challenged by their lack of money to provide healthier food choices for their children. Economic hardship will be explored under (a) *Falling short: Not enough money to purchase healthy foods*, and (b) *Responsibility without power: Structures outside mother's control.*

Falling short: Not enough money to purchase healthy foods. Mothers' best intentions were thwarted by limited income to buy healthy foods. All mothers of every income recognized that healthy foods (fresh fruits, fruit juices and vegetables, whole

wheat products, milk...) were more expensive than less healthy processed foods and sugared drinks. To illustrate, mother #8, a 25 year old, single, Caucasian mother of three whose income was below the LICO rate stated,

> (Mother #8) Like all the healthy stuff, usually sometimes it's really expensive. I'll try sometimes when I first go into the grocery store and the kids are with me I'll say, "first things first, we'll get fruits and vegetables" – and they are like ok but can I have this and I say, "uh that's kind of too much for just a couple" and they are like yeah but mom it's good; it's healthy for you.
>
> (Mother #14) The gummy candy that the kids eat, I really don't like them having those and I don't buy them at all - So the Fruit to Go, there is no sugar added, it's purely fruit. It tastes much like the gummy candy and it's in the same type of package so I don't mind as a treat once in a while... it would be much more expensive I would say, probably triple. You can get the boxes of the gummy candy for a dollar and these are probably close to three something ... Someone with a low income it would be very hard to make those choices.

All mothers who were living below the LICO rate wanted to purchase certain foods to promote their children's health, but cost got in the way. They expressed feelings of frustration and guilt about not being able to provide the healthier food choices.

> (Mother #1) Yeah, like my children's health. Like I know that they need the four groups but sometimes I can't afford it all. So I try to get the fruit in the can. Even though it's still more expensive so but yet they're still going to get it.
>
> (Mother #4) I'd like to be able to make better food choices for him like healthier, like salads and stuff. But to buy a salad that's not cheap and its one meal and it's

like $7 for one meal and it's only a side of a meal so. It doesn't happen very often. But he likes it, he loves salad.

Responsibility without power: Structures outside mothers control. Some mothers who had incomes below the LICO rate reflected on the responsibility they felt towards providing healthy food choices for their children and their actual power to do so. These mothers recognized and were critical of the structures beyond their control that stood in their way of making food choices that promoted their children's health. While discussing the importance of providing nutritious food choices for their children; they were cognizant that with their present income this was not something they could easily accomplish. Even acknowledging the futility of their efforts; mothers kept on trying to provide adequate food for their children. An exasperated, young, single, Caucasian mother of three who stated she wanted to "follow Canada's Food Guide recommendations" described the attempt as impossible.

(Mother #3) I'd like to make sure that they had their 5-10 fruits and vegetables a day but I honestly cannot afford to keep it all. Like it's just impossible - And then to provide myself with it - I can't. And when I'm not breastfeeding I'd go with out and make sure my kids have what they have. But where I'm breastfeeding then I have to have it too and I find it really difficult. Cause if they say 5-10 a day for all three of us that's 30 things of fruit a day and if you times that by 31 days in a month. It's impossible.

Similarly, mother #2 who was pregnant during our first interview commented,

(Mother #2) Like every price is going up, like $7 something for a four litre of milk and four litres don't go that far. Especially when it's me that has to drink it

and my two older children and soon it's going to be a third. It's an awful lot of money for milk and then the fruits like the prices on them are sometimes outrageous.

In summary, not having enough money to regularly provide healthy foods for their children was a serious source of never-ending stress and frustration for mothers with incomes below the LICO rate. It was a factor that motivated at least one mother to take less food on occasion, so her children could have more. Mothers living below the LICO rate described frequently having to make do with less acceptable food choices. Some mothers described buying what their children would eat, even if it was less healthy, so that food would not be wasted.

Mothers living below the LICO rate recognized their financial constraints and worried about their children's nutrition. These mothers were forced to plan more effectively and to work harder every day of the month to increase their children's ability to eat healthier foods. This was particularly true for mothers with restrictive feeding goals who were dedicated to providing healthier foods on a more consistent basis.

Never enough time: The invisible, pervasive foe. Without exception, all mothers in this study mentioned time as a significant factor that often prevented them from making preferred, healthier food choices for their preschool children. Mothers expended a great deal of time and energy in making food choices for their children. Much of the work involved in feeding the family is unseen and therefore not accounted for when discussing the time it takes to carry out this work. Only actual physical tasks like buying groceries or preparing meals can be seen and measured. *Never enough time: The invisible, pervasive foe* is described under (a) *The invisible work of planning takes time:*

Meals just don't happen, (b) *Mothers struggle against the clock: Healthy meals take more time and ability*, and (c) *Convenient foods are less healthy, but timely.*

The invisible work of planning takes time: Meals just don't happen. Every mother in this study believed they could make better food choices if they had more time. More time to plan meals, and more time, energy and skills to prepare meals. As fulltime working mother #15 confirms, "I'm tired, stressed, or whatever and I tend to rely on quick meals instead." The planning that mothers did was part of the invisible work of feeding children. It took time and was a part of mother's everyday experience although it went unseen. Planning was noted as a key element to success, as full time working mother #13 stressed, it takes time. "If you were home and could organize. To eat healthy you have to plan and that's just the key. If you don't have the time for that…"

Mothers described thinking frequently about meal planning and preparation throughout the day. They thought about what foods they had, what was needed, and how they could fit in everything that needed to be done into the time available. As illustrated by mother #15,

> (Mother #15) No and you're always thinking what am I going to make for tomorrow? Will there be enough left over from tonight so that I won't have to cook tomorrow or if there's not enough left over for tomorrow it's what can I get to supplement it? Pick up a salad on the way home or whatever. So it's almost like it's something you're constantly thinking of.

Mothers struggle against the clock: Healthy meals take more time and ability. All mothers in this study appeared to share an understanding that home cooked meals were the healthiest meals. This understanding caused additional concern for mothers as

they recognized that home cooked meals took the most time to prepare. Life for almost all mothers did not allow time to cook nutritious meals every day. This was true both for working mothers and for mothers that stayed at home caring for their young children. Mother # 9, a single, Caucasian mother with an income below the LICO rate was a stay at home mother caring for her preschooler and infant daughter. She noted,

> (Mother #9) Lengthy meals are very, very hard. Like last week I made cabbage rolls and it took hours and hours before I even got them in the oven. Like something that would have taken me normally an hour probably took me four, just because of having to take care of the baby at the same time.

Some mothers described themselves as poor or inexperienced cooks, which constrained their ability to cook preferred meals. Like every other mother they were pressed for time, however these mothers were not able to take the time they felt they needed to learn to cook or to try new recipes. In this study, cooking ability was not dictated by level of education. Mother #13 was a Caucasian, married, university educated mother with a professional job, while mother #8 was a Caucasian, single, unemployed, mother living below the LICO rate.

> (Mother #13) Yes, for sure. I have never cooked a turkey dinner in my life. I have always relied on my mother and mother-in-law for that stuff anytime there is a big event. There are lots of things that I haven't attempted yet, but I would like to have more time to do that stuff.
>
> (Mother #8) Yeah there are a lot of things that I think that I could make - but am I going to know how to make it right or is it going to cost too much to make it? There are a lot of different things I've been looking at – and I go – I think they

would like that or I would like that – but how do I make it though? Or is it going to cost too much for all the ingredients? So then I just put it off for now.

For this mother below the LICO rate, the concern of buying new ingredients and taking the extra time and effort to try to prepare a new food that her children might not like seemed too great a risk.

Convenient foods are less healthy, but timely. The food choices mothers were able to purchase for their children were imposed on them by the choices offered in the grocery store. Mothers in this study recognized that foods that were the quickest and easiest to prepare were generally not the healthier food choices for their children. This incongruence was another dilemma for mothers. They did not have time and the convenient choices most available to them were the less healthy ones. Mothers were conflicted by this disparity.

(Mother #2)You can look in the grocery section or the produce and you find all kinds of things out of a box or out of a can, it's very convenient. You just open it up and throw it in the microwave but it's not the best choice.

(Mother #7) Yeah and the time too--convenience is important. If I have to go to work at dinner time my shift starts at 12 o'clock then a lot of the times it will be like 11 o'clock –"mom, I'm hungry". So a lot of the time it's something that's quick and easy to make but still somewhat good for them, usually one of the canned pasta things or the toast and jam. Convenience and time is a big thing.

(Mother #3)- They like hot dogs - It's like a quick, easy meal if I have to. So I try to keep them on- hand ... I try to minimize the amount that they eat because it's just too much processed.

In summary, all mothers regardless of demographics acknowledged time as a significant constraint that challenged their ability to regularly provide healthy food choices consistent with their feeding goals. Much of the work that mothers do in meal provisioning is invisible to others. The associated, almost incessant, planning and worrying about what, when, and where to feed her children steals much of mothers' time, unbeknownst to others.

Societal Deterrents: Discovering the Unaccommodating Food Environment

Food marketing practices as described in Chapter Two include a variety of techniques such as food advertising, food pricing, product placement, merchandizing, labelling, branding, packaging, in-store displays, online advergames, branded toys and clothing, sponsorship, character creation and celebrity endorsements (CDPAC, 2008). According to the CDBHA, foods and beverages marketed to children are mainly unhealthy and increase their risk of becoming overweight and obese. The food marketing practices that hindered mothers' ability to make preferred, healthier food choices for their children will be discussed under (a) *Food marketing practices directed towards children: Discouraging health*.

Food marketing practices directed towards children: Discouraging health. Mothers described food marketing practices that negatively influenced their ability to make food choices that were consistent with their feeding goals. Almost all mothers described taking their children with them when they went grocery shopping. Some mothers living below the LICO rate took their children to the grocery store because they wanted their input, they wanted to buy foods their children would eat in order to avoid food wastage. Many items that children requested however, were uninvited requests for

unhealthy foods. These were foods that mothers would have preferred not to purchase because they were less healthy or costly. Mothers with permissive feeding practices who wanted to restrict their children's access to less healthy foods were especially challenged to resist children's pestering in the grocery store. To further explore the food marketing practices directed towards children that discourage health, this sub category includes: (a) *Enticing children through food advertising and pretty packaging: Grocery stores cashing in on pester power*, (b) *Getting mother to pay more: Pricing and merchandising*, (c) *Grocery stores designed to encourage child's unhealthy food requests: Product placement and in-store displays*, and (d) *Grocery stores and restaurants teaching parents: Subliminal messaging*.

Enticing children through food advertising and pretty packaging: Grocery stores cashing in on pester power. Food advertising to children and cartoon characters on items were noted by all mothers as significant factors in influencing the food choices that children requested their mothers to buy. In the grocery store children frequently recognized advertised brands of food. In some cases children requested food items they did not like simply because of the powerful effect of the advertisement or the character associated with the product. As mother #10, a 34 year old single, Caucasian mother of two with an income below the LICO rate stated,

> (Mother #10) My youngest usually asks for cheese strings – now that is one thing that he is not a big lover of is hard cheese. He'll ask for cheese strings - but I tell him – you don't like them. I got them for him once and he didn't eat them. But I think it's more because he sees the funny little man on the commercial that - you know, cheese strings are fun and all this... Like if I have an ordinary block of

cheese and I am grating it for supper and if he asks what it is and I give him some- he won't eat it.

(Mother #11) Sometimes, if he sees it, like Shrek, he's like oh I want Shrek. And then he won't eat it at all. It's just because it's Shrek... or if it's Spiderman he wants it because it's Spiderman.

(Mother #6) JK: Oh yeah, that Dora candy stuff that they have on TV, those gummy things, they can be a battle in the grocery store. You know like if they have Shrek on them…. It doesn't matter… it could be a rock but so long as it had a Dora on it she would want it…..

Children were also drawn to products with packaging designs and colors made specifically to appeal to this younger age group. Children pestered their mothers to buy these foods when less expensive, comparable food was available.

(Mother #2) Anything that's directed towards kids is going to be more expensive. Cereals, you're talking $7.99 for a box of cereal! It's ridiculous. You can get a box of cornflakes for $2 something - but kids aren't going to go for that. They don't want the plain flakes with the no frill on the box. They want something that's going to jump out at them, right.

Getting mother to pay more: Pricing and merchandizing. In addition to being designed to encourage unhealthy food requests, grocery stores were also noted by mothers to encourage child directed healthy, but much more costly snacks.

(Mother #8)– Now they got these little things like apples they come in these little bags they are for kids. They have apples and oranges and those little tiny bananas and they pick those things for treats.

(Interviewer) That's probably more expensive though

(Mother #8) Yes, because it only comes with a couple of apple slices in the bag

(Interviewer) So it would probably be less expensive to cut up an apple

(Mother #8) Well that's what I wanted to do but they were like – look at this in the grocery store

Following up on this mother's story, I observed the produce section of a grocery store and noted a bag with cartoon characters containing six smaller packages of apple slices. All the packages in total might have added up to four or five apples. The price was $3.99. I looked across the aisle and noted that a whole bag, about 15 apples was the same price, $3.99.

Some mothers were critical of the grocery store set up suggesting that the display of particular items was not a coincidence and was designed purposefully so that children would see these food items and ask for them. A Caucasian mother of two, whose income was below the LICO rate had completed some years of university, however was unemployed commented,

(Mother #2) It does because they're all within their reach and I think that it's purposely put there. They say that the grocery stores are set up strategically. That's why the milk is at the very back of the store, so that you have to go through the other aisles and you'll pick up five or six more things before you hit the milk that you had originally come in to get.

A Caucasian mother of two, who had a part time job in a non-grocery store noted,

(Mother #7) Oh yes, my friend was in the merchandizing department – he was a manager in the grocery store there and they were selling plastic cups with kids

designs on them. And the cups were on the bottom two shelves and they were selling like crazy because they were at the perfect eye level for small kids and then for some reason they moved them to the top shelf and their sales dropped probably by about 80% he said- because the kids weren't seeing them there - and of course in that store at the time the merchandizing department was right by the check outs – so you are right in the lineup - the kids would be able to see it perfectly. But when they moved them they hardly sold a cup after that. Cause they were like a couple of bucks for a cup and it's like "oh I want one" – it's only two dollars- ok put it in your cart. It's easier just to give in.

Grocery stores designed to encourage child's unhealthy food requests: Product placement and in-store displays. Mothers were challenged to provide healthy food choices for their children by the way foods were displayed in the grocery stores. All mothers described the grocery store as set up to encourage kid's unhealthy food requests.

(Mother #9) I do all my shopping up at Sobeys and right where the check- outs are there is always a big bin there filled with chocolate bars – so she sees it no matter what because when you go to the checkout there's the big bin – and then she just starts asking for them – every time it never fails

(Mother #2) When you go up to the cash they have all these snacks and stuff that are right there within the reach. Chocolate bars and everything. You know, you can't get out the grocery store without them wanting this and wanting that.

(Mother #5) My preschooler she wants ice cream, ice cream bars. More candies, more chocolates, It's all what's low level at their eyes or where she is sitting in

the basket. She points to that, that, that – and that's when I decide no, no, no. It's always more junk.

Mothers were especially challenged in this public setting to referee their preschool age children's food requests with the choices they would have preferred to make for their children.

Grocery stores and restaurants teaching parents: Subliminal messaging. Food marketing practices in grocery stores as well as in restaurants appeared to play a role in suggesting what foods were appropriate for children. These suggestions swayed mothers and children towards food choices that were not necessarily the healthier food choice. This mother gained her knowledge of what children needed for school lunches from TV advertising.

(Mother #16) He gets excited when he sees things on TV and he's like I should get that and we will go get it and he won't eat it. Especially things like the little lunch packets and stuff that's needed for kids going to school.

During an observation session in a grocery store I noted what I assumed was a 'back to school' grocery display at the front of the store. It was a large display, about eight feet wide and six feet high – large and very noticeable. The display consisted of a collection of mostly unhealthy products. There were boxes of Wagon Wheels, Bear Paws, juice packs (real juice as well as juice beverages), Kraft Dinner, Rice Crispy squares, and chocolate covered granola bars. These appeared to be the store's suggestions for children's school lunches. These quick, convenient, less nutritious food items were noticed by mothers. To illustrate,

(Mother #6) Yes, you almost feel like a good parent for buying them because it's like a back-to-school recommendation and that this is what every kid needs along with their pencils - they need Bear Paws and Fruit Loops.

(Mother #13) It takes more time to make your child a salad than it does a jam sandwich or shove in some cookies for dessert, definitely. But it is displayed right in front of them. It's quick and easy, it's boxed, it's packaged and you can throw it in.

Other mothers commented on restaurant menus that promoted the same child menu choices such as chicken nuggets and fries, hot dogs, grilled cheese – suggesting that this is child preferred food. One mother commented on a child menu that surprised her because it offered a healthy food choice not generally found on a children's menu.

(Mother #13) I went to one restaurant and I was so impressed... I didn't have my own kids there but a friend of mine had her child there. They had the child's menu and I was looking at it and like I said it's the same thing in all the restaurants, the grilled cheeses, the chicken fingers and fries and I said so what are you getting and she said you guess. I looked and I said then you must be getting the grilled cheese and we kind of went through the menu and she said no to everything. I looked down at the bottom and there was a choice of salmon and rice on a kids menu, which I had never seen before.

From grocery store displays to restaurant menus there seems to be certain ideas about what children want to eat. For parents who might not have considered other food choices they could be convinced that this is what children should be eating; what every

child is eating – what's normal. Food marketing practices put pressure on mothers to purchase these items because they are there to see and for children to ask for.

In summary, food marketing practices added additional stress and constrained mothers' ability to provide food choices consistent with their primary feeding goals for their children. Pestering was a serious issue that every mother described to some level while they were shopping with their children. Mothers were motivated to come up with a variety of tactics to deal with this problem. Mothers, particularly those with more restrictive feeding goals, were compelled to compete with marketing practices that constrained their ability to feed their children well. This can be a sometimes exhausting activity that goes relatively unnoticed.

Summary

In this Chapter, I introduced and presented an overview of the substantive theory of *Persistent Optimizing* accompanied by a graphic illustration. *Persistent Optimizing* consisted of three major conceptual categories (a) *Acknowledging Contextual Constraints*, (b) *Stretching Boundaries,* and (c) *Strategic Positioning.* I mainly discussed the first conceptual category, *Acknowledging Contextual Constraints.* This category illustrates that mothers' primary intention was to get their children to eat foods that mothers considered healthy on a more consistent basis. Mothers' intention to provide food choices that promoted their children's health was constrained by a variety of multiple, competing, interpersonal, and socio-environmental factors or conditions that mothers experienced and acknowledged. Mothers experienced relational conflicts with their children who often had preferences for less healthy foods and with their partners, extended family, and close friends when their food values conflicted with mothers own

values. Mothers experienced the impact of restrained resources on making choices about what to feed their children. Some mothers, particularly those whose incomes were below Statistics Canada's LICO rate, were constrained in their ability to purchase preferred healthier food choices as these were often more expensive. All mothers experienced constraints related to time as healthier meals were considered to take more time and skill to prepare. Finally, mothers experienced societal deterrents in the form of food marketing practices that encouraged their children's preferences for less healthy foods. Mothers increased awareness of contextual constraints heightened their dissonance and motivated them to intentionally develop and initiate strategies to bring them closer to their goal of making preferred, healthier food choices for their children on a more consistent basis.

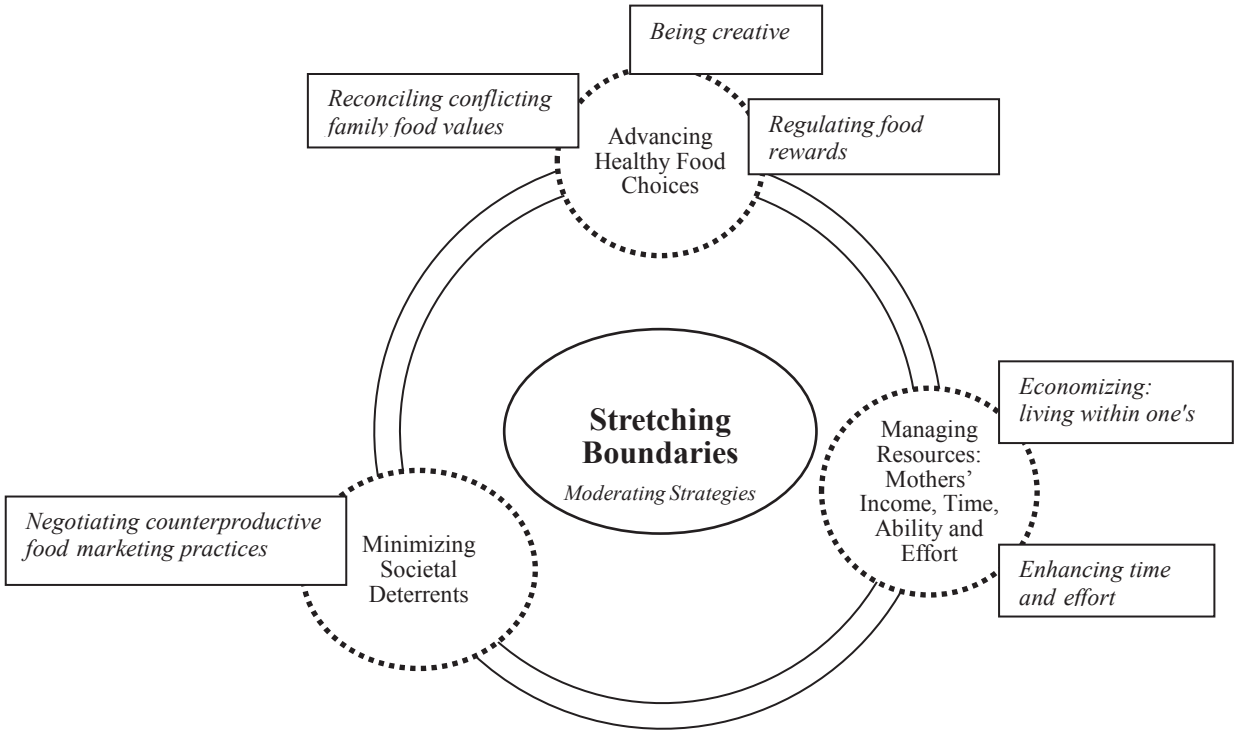
Mothers moved from the first major category of *Acknowledging Contextual Constraints* to the other major categories of *Stretching Boundaries* and *Strategic Positioning* where they enacted a variety of moderating and optimizing strategies to negotiate the constraints that deterred them from their goal of providing preferred food choices for their children. These remaining categories and their sub categories will be discussed in Chapter Five and Chapter Six.

CHAPTER FIVE: STRETCHING BOUNDARIES

In this Chapter, I build on the findings presented in Chapter Four. I present and describe *Stretching Boundaries* as the second major conceptual category of the process of *Persistent Optimizing*. I describe the series of moderating strategies that mothers used initially to moderate or lessen the individual, interpersonal, and contextual constraints that hindered their ability to make preferred food choices for their preschool age children. In *Stretching Boundaries* mothers actively and intentionally responded to the constraints and the resulting dissonance that they experienced in *Acknowledging Contextual Constraints.* Once mothers had done all they could to moderate or mitigate these constraints they moved on to using optimizing strategies in *Strategic Positioning*.

Mothers in this study were not always able to make their intended, healthier food choices for their children. Mothers had to juggle their goal of meeting their feeding goals with competing goals such as offering foods that their children would eat, having enough money to cover all their basic needs, or having enough time. The major conceptual category of *Stretching Boundaries* will be described in this Chapter and illustrated in Figure 3.

Figure 3. Stretching Boundaries



Mothers appeared to intentionally enact strategies to counteract the conditions and structures that negatively influenced their ability to make their preferred food choice at a particular moment in a particular situation. These strategies are referred to as moderating strategies and are illustrated in Figure 3: *Stretching Boundaries*. In this study, mothers used a variety of strategies to stretch their food choice boundaries; to put them in a stronger position to make their preferred food choice. Moderating strategies used by mothers included: (a) *Advancing Healthy Food Choices* (b) *Managing Resources: Mother's Income, Time, Ability and Effort, and* (c) *Minimising Societal Deterrents.*

Advancing Healthy Food Choices

All mothers in this study declared that providing foods that they considered healthy for their children was an important goal. A great deal of time and effort goes into encouraging children to eat healthy foods. This work is usually done by mothers, and like

most of the tasks associated with feeding children, it is mainly invisible. The mother-child feeding relationship remained central as mother's primary feeding goals and food parenting practices intersected with their child's agency around food choices and informed many of the strategies that mothers used to encourage their children to eat foods that promoted health. *Stretching Boundaries* in this context relates to mothers' ability to get their children to eat preferred, healthier food choices. Children's food preferences were often towards less healthy foods. In strategizing to get their children to eat different, healthier food choices, mothers were stretching the food choice boundaries that their children preferred. Family members also had food values that conflicted with mothers preferred, healthier food choices for their children. These mothers had to enact strategies to encourage family members to stretch the boundaries of their present food choices to offer their children healthier foods or to offer less healthy foods less frequently. In these ways children's exposure to less healthy foods was limited. Strategies mothers used to promote healthy food choices are summarized under the headings: (a) *Being creative, (b) Regulating food rewards* and (c) *Reconciling conflicting family food values.*

Being creative. Recognizing that their children often preferred less healthy foods, mothers described a variety of strategies that they used to get their children to eat more foods that promoted health. Some of these strategies included considerate negotiation, mothers eating foods that they did not like, persistently offering healthy foods, seeking consensus, using tricks, and including the child in food preparation.

Mothers who were more authoritative in their parental feeding styles creatively used strategies like negotiation or compensating for their children's likes and dislikes, which enabled them to exercise more influence over their children's food choices.

Considerate negotiation is present in the following example where mother #15, a married Caucasian, professionally employed woman was considerate of her child's opinions and negotiated to encourage healthy food choices. Mother #15, commented,

> (Mother #15) I allow her to voice her opinion on what she likes and what she doesn't like. If we are having chicken and it has a sauce on it and she says I don't like that sauce, I cut up her chicken and I will take it and rinse the sauce off it, dry it off for her and put it back on her plate and she might want ketchup with it instead. That's fine as long as she's eating the chicken I'm fine with that...If she eats the chicken but leaves the potato then I give her more chicken. That's fine as long as she's full in the end. If she eats the potato and not the chicken I'll give her more potato because today she wants potato.

To set a good example, some mothers ate foods they did not particularly like to encourage their child to eat them. This Cape Breton mother who was married to an Asian man and who recently moved back to Cape Breton with their four year old son noted,

> (Mother #18) Asian food to me is not really that delicious. It's like oh no seaweed but I still eat it and because I don't want my son to think now I'm in Canada and I don't want to eat that if mom's not eating that... It is a sacrifice but it's healthy. So, I should eat it anyway.

Another strategy that was described by some mothers was persistently offering healthy foods. This active encouragement was very time consuming as mother #6, who was a Caucasian, married woman working in the health care field commented,

> (Mother #6) Just relax and offer the good stuff and keep offering and keep offering, if she says she doesn't like it, by the 44th time she might just take it and

forget that she didn't like it. That type of thing.

Mother #10, a Caucasian, single mother who lived below the LICO rate tried to involve her children in seeking consensus; however in the end this mother who was somewhat authoritarian had the final say.

> (Mother #10) Yeah, him and his brother if I ask them what to have for supper – it has to be a consensus – we have to agree- it can't be one choose one and one choose something else. If I end up making three small things for lunch – which I don't mind for lunch- But when it comes down to supper it's one big meal for all of us. So we have to agree... if we can't agree- I just put my foot down and say ok we are having this. It might not work well sometimes but I tell them they have to have something healthy.

This mother added,

> (Mother #10) If my oldest son could live off of pizza – he would – and he thinks everyone else should too. So by telling him you have to have this and this--it can be very argumentative at times but still he'll sit down and he'll eat it and he will enjoy it.

Mothers from all parenting food styles described using tricks such as hiding vegetables or meat in mashed potatoes. Mother # 3, who was a 23 year old, Caucasian, single mother with three children and lived below the LICO rate commented,

> (Mother #3)Yeah well my daughter what works for her – because you got to find out what works with your child. She for some reason, she loves potato and I just take her whole meal and cut her meat up into little tiny pieces – cause she doesn't eat meat that much- and I got to hide it and I'll take all of her food and I'll mix it

up into one if I'm having potatoes cause she just thinks she's eating potatoes and she doesn't know the meat's in there.

Mothers also tried to make foods more appealing to the child and encouraged the child to help in preparing foods as noted by mother #2, a 40 year old Caucasian, woman in a common law relationship who lived below the LICO rate.

(Mother #2) Sometimes when I make them a peanut butter and jam sandwich for a snack, I'll roll it up instead of, you know and it's a PB&J roll. And they just think, Oh that's great! So they're going to eat it all. There are little things you can do to influence your kids in a positive manipulation they don't even realize that you're doing. But it gets the job done. The goal is to give them something that they're going to like, that's going to have good taste and it's going to be nutritious.

Mothers whose food parenting style was more permissive were not good at refusing their children's food requests. These mothers described extra tricks to get their children to eat healthy foods. Mothers described hiding foods that were unhealthy, keeping them out of sight and reach of the child. If the child didn't know it was there they would not ask for it.

(Mother #3)Their favourite is hot dogs...I make sure that I don't leave them in the fridge and now that I got my deep freeze – I hide them – and I tell them I don't have any. My son-- he can get into the deep freeze because he's bigger – he'll look in there and say "no you don't. You got them". So I started to hide them

In summary, mothers worked very hard to encourage their children to eat healthier foods. Mothers with authoritative food parenting practices were able to considerately negotiate with their children. Authoritarian mothers tended to 'put down

their foot' while mothers with permissive feeding parenting practices tried to hide unhealthy foods from their children to avoid a battle they felt they would lose. All mothers tried to make foods more appealing to children. Most of this work was above and beyond simply buying groceries and putting a meal and snacks in front of a child. These strategies speak to the mothers' commitment to get their children to try healthy foods, or to stretch the boundaries of their children's food choice. Many of these efforts were invisible to others and took much of mothers' valuable time.

Regulating food rewards. Food rewards were generally referred to by mothers in this study as "treats" – meaning special, often less healthy foods that their children enjoyed and that mothers gave to them on certain occasions. Food rewards generally included take-out meals, fast food restaurant meals, and less healthy or empty calorie foods. Regulating food rewards was described by all mothers to some extent. Most mothers, irrespective of their feeding goals, stated that giving "treats" every now and then would not harm a child's health. Food rewards were often given to reward good behaviour in various settings such as at home, church, or at the grocery store, or for finishing their meal. Some mothers in this study admitted that they and their partners enjoyed "treats" therefore, foods considered treats were often part of their regular grocery order. Mothers with liberal feeding goals for their children were often admittedly even more liberal with their own food choices. Recognizing that offering too many empty calorie foods was not in the best interest of their children's health, mothers attempted to limit them. One strategy that many mothers used was to hide these types of foods and eat them after their children went to bed. Mother # 16, a 26 year old, Caucasian, unemployed, married woman noted,

(Mother #16) Exactly, and if we do buy chips and we do buy him a treat we will hide our chips so that he doesn't see it. Or the pop, we will hide it where he can't see it and then when he's asleep, that's when we'll have our snack. That way I don't want him eating at nine o'clock at night chips or snacks so we hide it so he doesn't see it in the cupboard that he can't reach or see. That way he doesn't have the temptation to have it.

Mothers also admitted to liking food from fast food restaurants and recognized that their children enjoyed it too. Some of these mothers made an effort to limit their own intake to prevent their children from having too much of this food. Mothers also tried to steer their children towards healthier food choices even at fast food restaurants. This is illustrated in the following quote.

(Mother #3)- Well, around cheque days I'll treat us to either a takeout coming into the house or McDonalds. My son really and my daughter they love going to McDonalds for the treats, they get it like once, maybe twice a month - depends on my income and they'll get a chicken nugget happy meal with apple slices and chocolate milk is what their order is.

Mothers had all kinds of strategies for limiting treats so their children would not get too many. A few mothers were successful in convincing their children that pop was bad for them. Even if the mother drank it the child would not ask for it. Mother #11 who was a 23 year old, single, Mi'kmaq woman stated,

(Mother #11) He doesn't ask for it. He doesn't want to go around the bottle. Even if I got the bottle and put it near him he would freak and say get that away from me... He was still in a walker when I was telling him it was bad and don't be

drinking it. It's bad and no and stuff like that. I didn't want him to drink it and he's still not drinking it.

Other mothers ranked unhealthy foods and tried to offer what they considered better choices. For example, mother #10 and mother #2 who both had some college education were Caucasian, unemployed and lived below the LICO rate commented,

(Mother #10) Like you can go and get the little flavoured rice snacks – they might be cheddar, they might be dill pickle and they think dill pickle chips or whatever and they don't realize that they are a little bit healthier for them than chips are. So I kind of trick them – you could say. But they like them.

(Mother #2) For instance I'll give you an example he loves ice cream and I know how fattening and how much sugar it has in it so I will buy him frozen yogurt instead. There's no difference in the taste of it but a huge difference in the sugar and fat and calories, so little choices make a big difference.

In summary, mothers in this study admitted to working hard to limit the amount of less healthy food rewards their children consumed. Mothers acknowledged children's desire for these foods constrained their ability to provide only healthy foods consistently. Although there appeared to be some ambivalence as mothers themselves wanted to eat 'treats' and thought their children were entitled to them, it is important to recognize that mothers enacted many strategies to somewhat limit these less healthy foods in order to better promote their children's health.

Reconciling conflicting family and friend food values. Sometimes a mother's desire to give her child more nutritious food choices was thwarted by her partner, the child's grandparents, or by her friends. This was a cause of dissension for mothers when

others wanted to give their children less healthy foods more often than mothers felt were appropriate. Mothers strategized to find ways to reconcile these differences. To illustrate the following, these two mothers encouraged their children's fathers to support them in enforcing restrictions around unhealthy snacks even though the child's father was willing to allow them.

> (Mother #12) I have to speak to him [father] sometimes because we have to be on the same ground [around giving junk food to child]. We can't give in. If I put my foot down, don't let her [child] run to you.
>
> (Mother #11) If his father goes to the store and comes back I will be like he's not getting chips unless he eats supper, unless he eats his food first.

Mothers who were professionally employed and had higher levels of education and income described trying to set some boundaries by limiting the time children spent at their grandparents or asking grandparents to limit unhealthy foods. These mothers were not always convinced that their advice was taken. For example,

> (Mother #15) My parents, yes; there are always different types of cookies in their cupboards and Marcy knows that. I tell my mother to limit her in how many of those that she has. Oreos, she gets Oreos only at grandma and grandpas but I tell her and my mother she gets two Oreos and that's the cut-off... She doesn't give me a hard time. She agrees with me, but then she might be still giving her the cookies and ice cream behind my back and I don't know. I'm not informed of it anyway.

Mother #6 attempted to counter this problem by sending healthy foods with her daughter when she visited her grandparents,

(Mother #6) So it is kind of the bit of a treat day if she does go but I do offer suggestions to my mother and sometimes I will send out some of her favourite foods with her and tell her this is for you and Nanny to share. It kind of gives them an opportunity then to have what I want them to have and have it be a treat like fresh strawberries, fresh peaches, or some fresh grapes or whatever she tends to be in the mood for, blueberries and stuff like that, those are treat foods that she considers.

In dealing with friends who wanted to give treats to her child, mother #6 avoided confrontation by limiting contact and discarding treats without the child being aware.

(Mother #6) … so we kind of limit her contact with them, and when the bag of stuff comes to the car, nothing is said about it - The next thing you know it gets lost. You know, nobody knows where it went, or where it landed.

In summary, mothers enacted a variety of strategies to deal with family and friends to promote healthier food choices for their children. Mothers were placed in the difficult position of maintaining family harmony while also attempting to promote their children's health.

Managing Resources: Mothers' Income, Time, Ability, and Effort

The amount of money and time mothers had available affected greatly the food choices they were able to make for their children. Mothers with greater income had greater selection over food choices as they could afford more. Generally all mothers struggled with a lack of time to prepare preferred meals. The tactics that mothers used to manage these ever present realities included: (a) *Economizing: Living within one's means,* and (b) *Enhancing time and effort*

Economizing: Living within one's means. Mothers living below the LICO rate were constantly challenged to afford foods that promoted their children's health. For these mothers, the cost of food and being able to afford food was a main and ever present concern. These mothers worried and strategized about this on a daily basis. Mothers economized by staying vigilant. Drawing upon their literacy ability, most mothers kept grocery lists so they knew what they needed each month. Mothers reviewed fliers on a regular basis and based many of their purchases on what was on sale at that time. For example,

> (Mother #8) "I live for fliers". Because if there is something I need and it's on sale that next week and you don't know until then so I'll put some money away and then I'll go and get it.

Mothers who did not have access to a vehicle were not as fortunate in taking advantage of special offers. As mother #4 stated,

> (Mother #4) I look at the fliers to decide where I go if there's better sales at one place. But it's hard because sometimes there's great sales at two or three different stores and I just have to pick and choose – cause of transportation, money, time.

Mothers found, saved, and used coupons to save money on purchases. Some mothers were more adept in finding and using coupons. (Mother #9) "Oh I live on coupons. I get them off the computer- Save.ca and through fliers; I just got a bunch of Huggies coupons from the Family Resource Centre." (Mother #8) "I go on the computer and there is a coupon site and you click on the ones you want and they will send them to you – so I`m always clicking." Another mother was less excited about coupons.

(Mother #10) Most of the coupons that you get in the flier around here are mostly for things like cleaning agents and things like that – so once in a while if I'm using Mr. Clean or laundry detergent I will use them – but not very often.

Some mothers kept themselves informed about sales through informal networking with family and friends.

(Mother #5) Everybody talks so someone will say there is a sale go get your bananas there or there is something on special over at Supervalu this week. We all tell one another – we are all talkative around here. There are three of us who get together for a cup of tea here or there and we say today I bought this and we tell each other.

(Mother #8)Yes, me and my good friend we always do that because she'll say did you get your fliers and I`ll say no not yet - well I seen that laundry soap is on – and I'm like well I need some of that – where at – and then I'll say this is on down here and she's like I need that for school – so like, yes, we always do that.

These mothers were resourceful; they shopped for sales, bought in bulk, stocking up on goods when they were on sale, they bought food in season. To illustrate,

(Mother #10) Yes, if I know I have *x* amount of dollars – I make sure that I buy things in larger quantities – if I get a big sized roast I get them to cut it in half and then we have two meals - and get the big bag of potatoes instead of getting the smaller ones. Then I know that I have enough for these so many days.

Mother #3 was an industrious mother and bought vegetables in season when they were on sale and blanched them so she would be in a better financial position to stock up on other food items.

(Mother #3) During the summer times I found that it was easier to find your vegetables on sale then you can buy a nice chunk of them and you blanch them and you put them away and it saves you in the other months and you can stock up on other stuff.

Mothers dealt with storage space for these extra goods in different ways. Mothers with deep freezers were at an advantage for stocking up when foods were on sale. For example,

(Mother #9) I put a lot in the deep freeze. If not I put it up in my room- There was a sale on Kraft Dinner it was 59 cents so I grabbed a whole bunch of it. So I wouldn't be able to put it all in my cupboards so I just leave it in a bag and put it in my bedroom closet

(Mother #3) I bought a deep freezer. It cost me a decent amount of money but when I got my back-pay for my daughter that I just had I went and I invested it in buying it so when things are on sale I can buy a chunk of it and I also bought a stand up food cupboard and put it down in my basement. So if there's spaghetti sauce or even the baby food or anything that's on sale I can stock up on it. Cause if you don't stock up and you're trying to buy everything you need in a month all out of your baby bonus. You can't do it.

When needed, some mothers used food vouchers from the Salvation Army or visited the local food bank. Visiting the food bank for other mothers was seen as a last resort. Mother #3, a Caucasian, single mother living below the LICO rate with three children stated that she used the food bank "sometimes, if I'm really down and out I do...They're good to have if you need them especially when you're down and out around

Christmas". In contrast, another older, single mother of two who was originally from Montreal used the food bank each month.

> (Mother #9) I do go to the food bank once a month... Well you get the cans a few cans of soup, you get two boxes of Kraft Dinner, and you get the bag of noodles. It all depends – a jar of peanut butter. I mean these are all things that I don't have to go buy.

Characteristically, mothers in this study who lived below the LICO rate planned ahead and exercised patience. For instance, mother #9 waited a month to buy the oil she needed to make a carrot cake after being given extra carrots at the food bank the month before. In addition, mother #4 exercised ingenuity,

> (Mother #4)Yeah some time the ingredients are just too expensive. Sometimes I try to substitute it with cheaper – like most recipes you can substitute with a cheaper no name version. 'No Name' is my friend. There are certain things that I won't eat 'No Name' because they don't taste as good.

In summary, mothers with incomes below the LICO rate had to work harder to create additional strategies to adequately feed their children. Mothers used 'focused shopping'; they followed fliers, saved coupons, and made lists purchasing a week's or a month's supply of groceries in advance to avoid impulse purchases. Mothers informally networked with other mothers to find out where the best deals were. They shopped around for the best food bargains. Most of the tactics that mothers used in this area, in particular the monitoring of foods, the short and long term planning of meals, the vigilance of searching papers and web sites for coupons and bargains, was mainly invisible to others. It was mothers' determination and resourcefulness in this area that

allowed her children to eat. Mothers' desire to feed their children was a driving force that made constant demands on their patience, their vigilance, and their stamina.

Enhancing time and effort. In this study time and effort constraints related to the multitasked work of feeding children was a pressing concern for mothers. Mothers expressed concerns that they often did not have the time, effort, or ability to prepare the nutritious meals they would prefer for their children. Mothers that worked as well as mothers at home with infants appeared most strapped for time. For many mothers planning ahead was an important strategy that helped them save time. For example,

> (Mother #10) Ok you have to tell me now what you want for tomorrow so I can have it ready. So they decided on blueberry pancakes and so I made them the night before and put them in the fridge. When they got up in the morning they put them in the toaster and they are already for them and it's a half decent breakfast for them.
>
> (Mother #14) The odd time I will take something and cook it the night before so that when we get home from work we have it. I would do the vegetables or something.
>
> (Mother #15) I make sure that I have something out of the freezer so that I can cook it when I get home from work the next day. I suspect that if I planned more long term I could probably make even better decisions whereas because I'm only planning day by day there are probably things that I wouldn't choose if I had planned long-term.

Mother #3, a Caucasian, single mother who lived below the LICO rate, described how she strategized to make more nutritious meals for her son who had started taking karate

lessons. There was limited time to cook meals between school and karate. Thinking about ways to compensate for this new time restriction, this mother considered,

> (Mother #3)Yes, or where I've been thinking about lately of how to provide cause I don't like giving my son quick meals on Mondays and Wednesdays when he's going to karate. I was thinking about either the night before making double the amount or having food left over for the next day at least for Mondays and Wednesdays or cooking my supper the day before for the next day. Because I'm thinking that if I have the extra time then that would save me and they would still be eating a nutritious meal instead of a canned food when you forget to cook, or take something out and got to make it to karate.

Some mothers with partners had the benefit of getting help with the cooking. Being able to share the work of cooking provided more opportunities for healthier meals. Mothers who were single or whose partners did not cook did not have this advantage. Mother #7 stated "my husband has more time when he gets home in the evening so he has more time to prepare a bigger more elaborate meal – where I have to rush it almost." Similarly, mother #14 noted that if she didn't get home before her husband that "he's the one who will typically come home and make it". Other mothers who lived with their partners added similar comments.

> (Mother #13) [My husband] is home so he is really good to cook but not every single night. He tends to be getting home late and if he's not home sometimes I will cook. I used to cook a lot more before I had the kids. I find I don't have a lot of time now or it will be something quick. Either he'll cook it or it will be pretty quick.

> (Mother #17) He's [partner] really good with all that stuff. I do most of it but if I'm behind a little on the cleaning or on the cooking… In the morning he helps get the kids their breakfast. Sometimes we will take turns if the kids wake up really early. We will take turns going down and getting them cereal or doing an egg really quickly.

Atypically, mother #5 a single, stay at home mother who had one preschooler, admitted that time was not an issue for her. Interestingly, she still had to plan in order to provide healthy meals. "I'm home. If it's something frozen – I take it out the night before going to bed. I plan things out."

Some mothers from all educational levels described their cooking ability as poor. They tended to stick to familiar meals that they were comfortable preparing but worried about the monotony of these choices. For major meals some mothers relied on their own mother to cook special Holiday dinners. Mothers who tried new recipes described reading about ingredients that they never heard of or could not afford. For some non-working mothers the local family resource center was seen as a lifeline. Some mothers availed of the opportunity to take courses that enhanced their skill to provide more nutritious foods for their children.

In summary, the time and effort needed to consistently prepare healthy meals for their preschool age children was generally not available to mothers. This was true for mothers who were employed as well as those who were at home caring for their infants. To counteract this fact mothers used a variety of strategies. Mothers described planning ahead such as preparing meals the night before or making extra on weekends to use during the week, and taking courses at the local family resource centre. Mothers were

sometimes able to share the workload with partners. In general, mothers recognized that their efforts increased their children's access to healthy foods, but the quicker, easier prepared foods that were less healthy were still a part of the meal plan. Mothers' efforts helped to stretch the boundaries of her capacity to make healthy food choices for her children by moderating some of the constraints associated with time scarcity and limited cooking ability.

Minimizing Societal Deterrents

A large component of making food choices for children occurs in the grocery store. Here is where mother shops for the foods that she brings home to her family. In this study, mothers almost always were accompanied by their preschoolers when they shopped. The mothers confronted a variety of food marketing practices that attempted to deter them from making healthier food choices for their children. Mothers described grocery stores as being designed to encourage children to ask for less healthy, often more expensive foods that were displayed at children's eye level and with cartoon figures that their children recognized from TV advertisements. Children's exposure to various food marketing practices influenced their less healthy food requests and constrained mother's ability to purchase preferred, healthier food choices. Recognizing that developmentally preschoolers are prone to temper tantrums, mothers had to use strategies to deal with their uninvited requests in a public setting.

Mothers were aware of and discussed the influence of food marketing practices on their children. Mothers noted that after their children saw a particular ad for a food item then their children would ask for it. Some mothers restricted TV viewing; these mothers felt their children were not as influenced by advertising although in the grocery store

these children still requested items with cartoon characters such as Dora, Hannah Montana, or Superman. In addition all children were familiar with McDonald happy meals that come with toys. Strategies mothers used to minimize societal deterrents are summarized under the heading (a) *Negotiating counterproductive food marketing practices.*

Negotiating counterproductive food marketing practices. Mothers used a variety of tactics in the grocery store to limit or discourage their children's requests for less healthy food items. Some mothers negotiated with their child through educating or discussing the health benefits of food items or compromising with their children. In dealing with a request for chocolate bars this mother discussed dental health.

> (Mother #15) She has and she doesn't get them. So she doesn't ask that much anymore because she's been told and generally I use the teeth because she can relate that they are bad for your teeth and they are going to rot your teeth and you can't have them. So she doesn't ask that much anymore.

Mother #2 felt it was her responsibility to teach her child about healthy food choices to discourage her child's request.

> (Mother #2)They go in the grocery store they see the brightness of the boxes and they just want what they're attracted to, not necessarily what's good for them. So, it's my job to distinguish, yes, it has a nice colourful box, oh but look- it does have all this in it too.

Some mothers tried to compromise with the child by letting her/him pick out one treat. This was easier than having to battle with the child over a number of different requests.

(Mother #17)We also with the three kids pick up a treat at the very beginning and that way they are not trying to reach for everything they see... We would get a pack of Smarties and then they can pass it around. Usually we rip the smarty box in half and they each get half.

For mothers with incomes below the LICO rate, the expense of the child requested item was another issue mothers described.

(Mother #10) He's pretty good that way – he does get his treats but he knows he can only have the one thing. So if he does come up with the argument that he wants more than that – it's up to him to make the decision – he has to decide. Do you want popsicles or do you want the cookies – you have to pick – but I am not getting both.

(Mother #4) Well I'd tell him that I will get him a treat but if I can't get what he wants – I'll try to get him something else – but it would not be as pricy as the thing he wants... I try to negotiate a little bit.

(Mother #5) Yes, well when you have no money you can't buy it and you feel guilty. But I try and compromise also- sometimes it don't work she's got a strong head also – only at three – she wants this or she really wants that one – so even with toys when we are in the shopping mall – they stick things where they can see it.

Mothers who were not skilled with compromising used different tactics. Some mothers limited uninvited child requests for food items by avoiding the junk food aisles. Notably, navigating away from the junk food aisle did not stop children's requests for child-oriented food items dispersed throughout the store. Mother #1 stated, "I try to avoid

the junk food aisle. If they go down that aisle I try to trick them saying "oh look at this; this is nicer."

(Mother #6) I try to make the most nutritious choice... I tend to try and go around the outside of the store. You know the fruits and vegetables, you know to get the most of it- and then I kind of pick and choose on the inside, because they tend to be more processed stuff.

A few mothers avoided conflict with their child using a tactic I describe as stealth. When their child asked for an item that mother did not want to buy she did not disagree with the child, she put it in the cart, but when the child was not watching she removed the item. Mother #5 who was a 48 year old, single, Caucasian mother who lived below the LICO rate and had moved to Cape Breton from Montreal four years ago noted,

(Mother #5) Pick, pick and then sometimes I'll hide it or - You girls want that this week- well I can afford it – we'll buy that

(Interviewer) What do you mean by hiding it – do you mean when you get home?

(Mother #5) No, when I'm not going to buy it, I'll put it back on the shelf when they're not looking... I don't have to hear her yelling – no temper tantrums.

Mother #6 who was a married, university educated mother with a professional level income used the same strategy as mother #5.

(Interviewer) So, the junk food is there, she asks for it and then you have to deal with the requests?

(Mother #6) Yeah, and then we get past it. But sometimes, she will throw it in the cart but it never makes it to the checkout.

Mothers recognized that saying "no" to their child in the grocery store could cause a scene. Therefore, mothers stated that they used different types of strategies to avoid a public confrontation with their child. The following mothers left the store,

> (Mother #9) Well I told her she could get it but she misbehaved so then I wouldn't get it for her and she flipped – Oh, she made a big scene because I wouldn't get it for her but I wouldn't give in so I ended up having to leave and go right home. I didn't even get to finish my shopping.
>
> (Mother #5) Yes exactly – because I walk out – if my daughter has a tantrum I walk out. I leave the basket there and I take off.

Mothers described shopping with young children as being very hectic. Moderating strategies helped somewhat in discouraging children's requests for junk foods. Although some mothers such as mother #12, who demonstrated a permissive parenting food style, appeared more apt to give into the child's food request. She commented,

> (Mother #12) Can I have this, all right; I will let her have it. It's based on her behaviour and circumstances and everything that's going around. If I'm stressed trying to leave or if I know it will shut her up, "here take it".

In summary, mothers in this study enacted a wide variety of tactics to counteract food marketing practices that challenged their ability to purchase and provide foods that promoted their children's health. Mothers tended to view the grocery store as a potential battle field; mothers worked hard to keep the peace, enacting moderating strategies, such as restricting child's exposure to food advertising, navigating away from junk food aisles in the grocery store, and negotiating children's demands for junk foods.

Summary

In summary, in the home, in the grocery store, and in general, mothers were confronted with myriad individual, interpersonal, and socio-environmental challenges that hindered their ability to make their preferred food choices for their children. In *Stretching Boundaries*, responding to these challenges took a great deal of mothers' time and energy. *Stretching Boundaries* was characterized by increasing reactivity as mothers actively and intentionally responded to constraints and resultant dissonance by enacting purposeful strategies to moderate constraining factors and conditions. Mothers were constantly reacting to acknowledged constraints through conscious strategizing. Mothers living below the LICO rate were more significantly challenged to provide healthy foods for their children on a consistent basis. These mothers used focused shopping, carefully scrutinizing papers and places for sales and coupons to find the most economical buys. Mothers from all income levels described preparing meals when they had spare time so they could serve these to their families when schedules were busy. In addition, mothers from all income levels devised strategies to use in the grocery stores to negate the power that food marketing practices had over their children.

The strategies that mothers created and enacted in *Stretching Boundaries* helped to stretch the boundaries of the food choices available to them by moderating or to lessening acknowledged contextual constraints, thus enhancing their agency to get closer to making their preferred food choice. For example, mothers who were more adept at getting their children to try healthier foods, mothers who lived below the LICO rate who used coupons, shopped for bargains, and stocked up on sales, mothers who prepared meals on the weekends to serve during the week, or mothers who were more skilled at

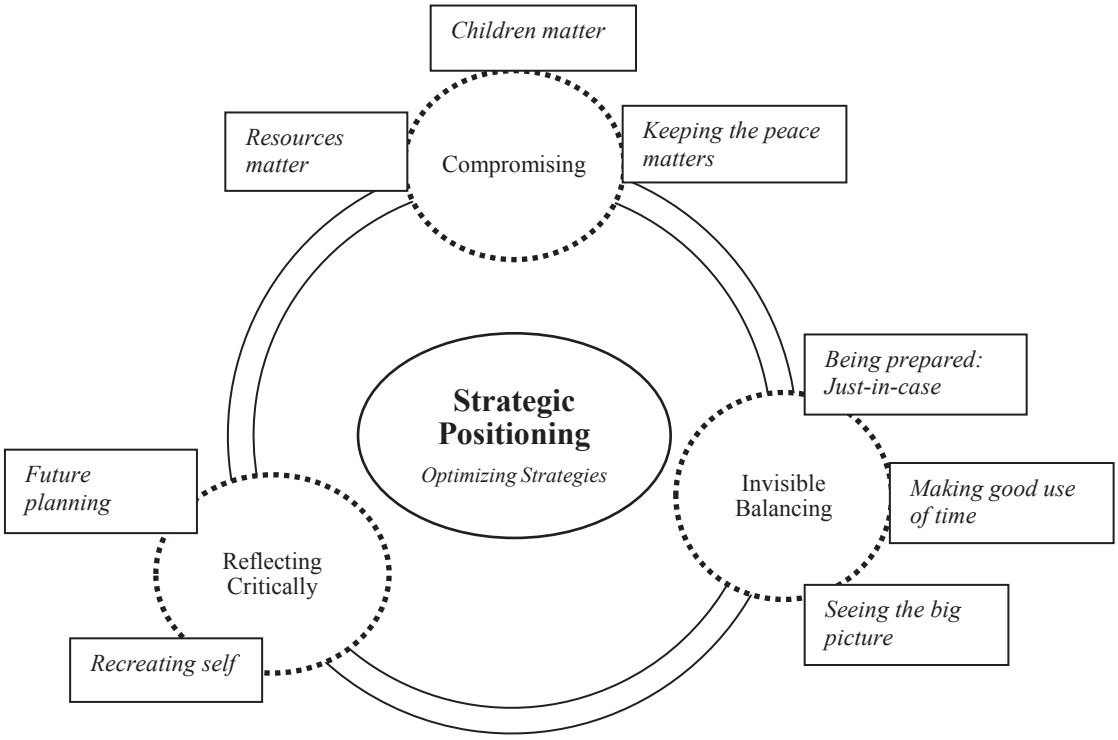
navigating the grocery store had more options and wider boundaries to make preferred choices in particular situations. More choices were open to these mothers than to mothers who were less successful at using these strategies.

Once mothers exhausted their use of moderating strategies they were left with making their food choices from the options available to them. Mothers strived to make choices consistent with their feeding goals, but they were not always successful. All mothers described doing their best to try and make the healthiest food choices they were able to make in the moment. Mothers moved from moderating strategies in *Stretching Boundaries* to optimizing strategies in *Strategic Positioning* to enhance their ability to make their preferred, healthier food choices on a more consistent basis. The final major conceptual category, *Strategic Positioning* will be described in Chapter Six.

CHAPTER SIX: STRATEGIC POSITIONING

In this Chapter, I present and describe *Strategic Positioning* as the third and final major conceptual category of the process of *Persistent Optimizing*. I describe how mothers reflected on the food choices that were available to them from their success at *Stretching Boundaries* and present the optimizing strategies they enacted to enhance their ability or to better position themselves to make food choices that were compatible with their feeding goals for their children in a given food situation. The major conceptual category of *Strategic Positioning* is depicted below in Figure 4.

Figure 4: Strategic Positioning



The strategies included in *Strategic Positioning* were referred to as optimizing strategies. Optimizing refers to making something function at its best or to find the best compromise among several conflicting requirements (Collins English Dictionary, 2009; English Encarta Dictionary, 2007). Mothers' capacity to moderate constraining factors in

Stretching Boundaries influenced the number and the variety of food choices available to them. Mothers with more options had greater agency and were more empowered to position themselves to make their best or optimal food choice for their children. In *Strategic Positioning* mothers thought and reflected on the choices available to them in each food choice situation. This reflection was generally broad as mothers tended to consider both their past and potential future food choices when choosing what food to provide for their children. Mothers responded in each food situation to position themselves closer to meeting their primary feeding goals for their children. *Strategic Positioning* is explained under the three sub categories; (a) *Compromising,* (b) *Invisible Balancing,* and (c) *Reflecting Critically*

Compromising

Compromising was the process where mothers identified the food choices available to them from the range of options presented through their success at *Stretching Boundaries*, they considered their primary feeding goals for their children, and then prioritized among these alternatives to choose the food that was the most preferred in a particular situation. Many contextual constraints conditioned mothers' agency to procure preferred food choices. Mothers had to make choices from the foods they were able to afford, the foods they had the time and the energy to prepare, and the foods their children would eat, which were further influenced by food marketing practices. In compromising or trading off, mothers described sometimes making a less healthy food choice in a particular instance in return for gaining something else such as money to buy greater amounts of food, managing time, better relations with child or extended family, or simply getting their child to eat something. In compromising, mothers attempted to take action

consistent with their personal standards; they worked towards making choices that enhanced their satisfaction with the food choices they offered their children. The tactics that mothers used when *Compromising* were subsumed under (a) *Children matter* (b) *Resources matter* (d) *Keeping the peace matters.*

Children matter. In compromising, mothers described sometimes making a less preferred or less healthy food choice in a particular instance in return for simply getting their child to eat anything. Mothers in this study whose moderating strategies were less effective due to their limited income or to the fact that their children were fussy eaters sometimes prioritized simply getting their children to eat. At times, providing the healthier food choice was compromised as these mothers often tended to cater to their child's less healthy or less expensive food preferences. Mothers recognized that their children had a lot of control over what they would eat. Mother #16 was a married, Caucasian, community college educated mother who was frustrated by her child's lack of interest in most foods. She had tried numerous moderating strategies such as disguising vegetables in mashed potatoes, involving the child in making foods more child appealing, and rewards to try and get her child to eat healthy foods. Mother #16 kept on trying even though for the most part, she felt she was not successful. She commented, "If they don't want to try anything then you can't make them try it. They will win, they will always win. They will always win, and you can't starve them." Mothers whose income was below the LICO rate also often catered to their children's food preferences out of necessity to save money by not wasting food. Mother #2, a 40 year old mother of three described her preschool age child as having a big role in picking out foods. Mother #2 remarked, "Because if I buy it and he doesn't like it-- forget about it; it's a waste of my

money. So he plays a big part. I mean I try to go with things that he likes." Mother #9 also made compromises between preparing a healthier meal that mother would prefer her child to eat in favour of a meal her child requested.

> (Mother #9) Yeah, well it makes it easier because there is some stuff I make and I try to get her to eat it and she won't eat it so it goes in the garbage. So it's wasted - so whatever she tells me she is going to eat I make that so I don't end up wasting food... I buy in bulk. So bulk and price is the big thing when I go shopping. And what my daughter will eat. I try to stock up on the things that will last me the month that I know she will eat.

Resources matter. Prioritizing as a component of compromising was not clear cut for many mothers, often the choice resulted from a combination of a few things. In relation to resources it was generally mothers' success at moderating their limited income and their children's food preference constraints that provided the food options available to them. In the case of this mother #2, in the end she valued the worth of the product over other considerations.

> (Mother #2)Well there are a lot of different things it depends on, what the kids really want to have, what I think they should have, what I think I can afford that day, and what I think is reasonable. Because maybe I can afford it but I look at it and I think, no I'm not paying seven dollars for such and such a product when I don't think it's worth it.

For mother #4 whose income was also below the LICO rate, she prioritized saving money by not allowing food to go bad in her home.

> (Mother #4) Like we had steak last night because it had been in there like for

three weeks. We had to cook it because I don't like food going bad; it's a big pet peeve of mine. I don't make extra well I do make extra just to make sure we have enough but I don't waste food. It really bothers me.

Many mothers with incomes below the LICO rate were forced to compromise, or choose between a more expensive, healthier food and a less expensive, less healthy choice. To illustrate,

(Mother #11) I find that healthy food is more expensive than junk food. It's really hard for me to shop healthy because of the cost. If you do the comparisons, if you get just white plain bread to whole wheat bread, whole wheat bread would be more. I would rather buy white bread.

Although mothers employed a variety of moderating strategies to counteract time constraints, on occasion, all mothers described compromising time and conveniences over what they considered were the healthier food choices. Mothers generally expressed feeling discomfort about this. They felt forced to compromise because of time scarcity, in the end making sure their child had food was the priority. Mother #14 who was a married, Caucasian, professionally employed mother of three offered less healthy foods on occasion because of the convenience "They certainly get more junk than I would like them to get and that's from me as well - sometimes like I said because of convenience and whatnot." Similarly, mother #15 stated,

(Mother #15) Yes. I can't say cost is an issue because I pretty much buy what I want to buy. It's the preparation. It's the planning time, the preparation time that are the two kinds of restrictors on being even better at preparing healthy foods.

At times, when mothers felt strapped for time and wanted to feed their children they relied on eating out or ordering take out. Mothers recognized that this was not the most nutritious food choice but it was convenient. “Like if I'm out shopping and we don’t have enough time to get home and eat--we usually just take out” (Mother #1). Mothers described trying to cook a healthy meal whenever time permitted, when they were not able to use this moderating strategy they compromised by offering quick foods that were generally less nutritious. Mother #7, a 30 year old, Caucasian, mother with a high school education who worked part time stated,

> (Mother #7) When we have time to sit down and make a bigger meal we can get the vegetables and stuff- he tends to go for more like the grilled cheese sandwich like which isn’t that bad. But now if I am trying to make them something quick before I go to work it tends to be just like one thing – it will be like the grilled cheese sandwich or one of those frozen entree things – he likes those. But he doesn’t usually get a variety – like he won’t get his vegetables and fruit kind of thing – he just gets the one thing.

Keeping the peace matters. Mothers used a variety of moderating strategies to maintain a peaceful relationship with their children or with their children’s grandparents. When these strategies were ineffective mothers sometimes compromised on the food choices they would prefer to make in order to please their children or other family members. The grocery store was often a setting where mothers felt obliged at times to give into their children’s food request. Even though the item was likely less healthy, most mothers did not want to get involved in a public altercation with their preschool age children.

(Mother #10) If I have my choice at the grocery store, if they are not with me, then it is usually that sort of thing or the little packages of crackers and cheese, things like that. But, of course if they are with me they end up getting like the little fruit candy in packets to take with them – but they are kids.

In other situations, mothers felt compelled to compromise their child's nutrition for a brief period to keep peace with a family member. This university educated, professionally employed, Caucasian mother who described herself as someone who didn't like to ruffle waters compromised her food preferences to be agreeable with her mother-in law.

(Mother #13) She [grandmother] hadn't seen them in a week so she wanted to pick them up the other night and when she came home she didn't just have a treat of a chocolate bar for them, she had bought them six bars. I was like they don't need that but she's so influencing that way. So, that has been a challenge for me and I don't know if maybe somebody else would have stopped it but I'm passive towards certain people I just don't want to ruffle any waters.

Mother #14, also a university educated, professionally employed, Caucasian woman, took a different stand; she reluctantly accepted the label of 'bad guy' because she refused to compromise her child's nutrition to please her family.

(Mother #14) I do feel that I'm usually the bad guy trying to control the junk food and stuff. That's typically a lot of places we go actually... and it's typically me that they know they have to come and ask - which is frustrating because they know I'm going to tell them no. You should know they can't have that; they already had an ice cream earlier today or whatnot. It's usually left to me to be the

one to say no, for sure... I've even had people, even if I say, no; will go and give it anyway. I will physically take it and say no that I don't want them to have it. People, it's just I don't know. That would be family on both sides, certain people on both sides that would do that.

In summary, the compromising that mothers did in this study was influenced by their individual, interpersonal, and contextual realities and their belief that children, resources, and keeping the peace matters. Mothers described value conflicts they experienced in specific situations and that they were pressed to compromise their prevailing value of their children's health to accommodate their income, time, or to keep peace with their child or other family members. For mothers in this study, the value or importance of protecting and promoting their children's health remained constant. It may have receded momentarily in certain situations where mothers made contradictory food choices but it was always present in mothers' minds. To promote their children's health, mothers followed compromised food choices with strategies to balance their children's access to healthy foods over a period of time. These strategies are described in the following section.

Invisible Balancing

Invisible Balancing describes the necessary adjustments or the optimizing strategies in which mothers engaged to counteract the food choices they made while *Compromising*. As previously described, in many food situations mothers felt forced for a variety of reasons to compromise preferred, healthier food choices. This did not mean that mothers gave up their goal of trying to provide food choices that promoted their child's health. No mother made the claim that their child ate healthy at every meal or on

every food occasion. Mothers engaged in an invisible balancing act to promote their children's health. Mothers described trying to balance out their child's health over a day or a period of days. Following a meal or snack that mother considered less healthy she often started positioning for the next choice that would be healthier. There was fluidity around choice making. Many choices over a period of time contributed towards mothers' goal of getting their children to eat healthy foods on a more consistent basis. Mothers were responsive to contextual constraints and persistently used optimizing tactics to place themselves in a better position to make food choices that promoted their children's health. Optimizing tactics that mothers used in *Invisible Balancing* included; (a) *Being prepared: Just-in-case,* (b) *Making good use of time,* and (c) *Seeing the big picture.*

Being prepared: Just-in-case. For mothers, particularly those with incomes below the LICO rate, the need to consider food choices to balance their child's health was generally more pressing. These mothers worried about not having enough to feed their children. They would plan for the 'just in case' scenario. Mothers who were successful at using moderating strategies to stretch their meagre incomes were relieved to be able to put away a little money every month just in case they ran out of something important like bread or milk. In doing so these mothers positioned themselves so that they could deal with this situation and their child would not have to go without healthy foods.

> (Mother #3) So I try to put money away for my milk , my bread because I find it better to buy fresh bread that freezing them unless you have to and I put the money away for that stuff every week. Like my milk, my bread, my fruits and things that are on sale.

(Mother #8) I usually go and get what I need and sometimes I'll put money away because--just in case that next week I look at the fliers and there is a good sale on.

Making good use of time. Mothers who stressed about not having enough time to prepare healthy meals every day ensured that on days that they had more time they would provide a slow cooked meal that would be healthier than the quick meals they gave on other days. These two single mothers, one Caucasian and one Mi'kmaq, who lived below the LICO rate, stated "I try to at least once a week to have a slow cooked meal for Sundays is when I try to have it. But during the week I got to try to make sure that it's a quick meal" (Mother#3). "My off days I would cook something good but today would not be a good day to cook for him" (Mother #11). Today was not a good day for this mother as she was a full time student and was at school all day long.

Seeing the big picture. Many mothers concerned themselves with the big picture when deciding the next food choice for their child. These mothers decided on their child's next food choices based on what their children already had or had not eaten. Mothers #6, # 14, and #15 were married, Caucasian, university educated, professionally employed, women:

(Mother #6) I think that when she is in daycare, I am pretty confident that she has gotten her carbs, you know when I look at the menu there is always bread and stuff. Not too worried about carbs, I am always worried about vegetables; concerned about whether she had something green or orange that day. So I will cook some frozen broccoli and also did she get enough protein for the day, or did she just have carbs and juice for the day, so I will try and get some good meat into her.

(Mother #14) Right, if they didn't have something for lunch, like if we went to McDonald's, I would try to make sure then at supper that they had something.... we will try to make up for that at supper time.

(Mother #15) I would say over a couple of days simply because some days she simply doesn't eat a whole lot and other days she'll eat everything. So I'm more concerned with over a few days. If she doesn't eat her entire lunch one or two days but I know she's having a good supper that night then I'm okay with that.

Mother #17 was a Caucasian, unemployed, married mother of three who lived below the LICO rate

(Mother #17) If they're having Kraft Dinner at lunch I think they need to get a protein or an apple... So this morning I thought okay, they had eggs and so they've had some sort of protein. My little guy didn't have eggs at lunch; I made sure I gave him something that had a meat pasta sauce in the dish... If one meal was lacking something then that would help me decide what I'm having for supper and for snack later. It's just a pressure to make sure they are getting something that is healthy for them.

In summary, all mothers enacted many actions in *Invisible Balancing* to enhance their children's consumption of foods that promoted health. Mothers were vigilant, always thinking towards the next choice in an effort to balance their children's food choices on the side of health.

Reflecting Critically

In *Reflecting Critically* some mothers in this study demonstrated an ability to stand apart from the everyday task of feeding their children to inquire and reflect more

critically into their situation, thereby illuminating the relationships of power and underlying social structures that affected their agency to exercise their preferred food choices. All mothers in this study were able to recognise that many individual, interpersonal, social, and environmental factors and conditions constrained their ability to achieve preferred, healthier food choices for their children. For the most part, mothers appeared to internalize this as an individual problem and developed a variety of optimizing strategies to help them make their preferred food choices as often as possible. Mothers' use of optimizing strategies demonstrated their increasing ability to manage or control the constraints they encountered in a particular situation. The mothers in this study seemed to 'take on' these contextual constraints with varying amounts of success. Although they expressed a desire to make better food choices on a more consistent basis, they seemed to state for the most part, they were doing well. This acceptance may have been a way to rationalize conflicting realities and diminish any cognitive dissonance they experienced. In any event, it appeared that the mothers were aware of the challenges associated with feeding their children and believed they were working hard to meet these challenges as best as possible. They developed and enacted an arsenal of tactics that increased their agency and empowered them to deal with the constraints they encountered. They were persistent and tenacious in their efforts to provide preferred, healthier food choices for their children on a more consistent basis. In this sense, all mothers demonstrated a growing level of individual empowerment.

The mothers' ability to exercise power or choice in a given situation may be viewed on a continuum. All mothers in this study recognized contextual constraints and exercised their individual agency to manage or control these obstacles. However, a few

mothers appeared to glimpse beyond individual feeding challenges to inquire more critically as to how and why these challenges existed. These mothers were less accepting of the status quo, they wanted change for themselves and for their children. In this sense, the mothers demonstrated an increasing level of personal autonomy or agency that empowered them to make independent decisions and act on them. In *Reflecting Critically* the optimizing strategies mothers used to explore their situation more critically were subsumed under the tactics (a) *Future planning*, and (b) *Recreating self*.

Future planning. Some mothers in this study recognized that present societal structures and conditions created an environment that slanted food choices in an unhealthy direction. These mothers believed it was necessary to develop strategies to help their children adopt healthy food habits at an early age to counteract future nutrition based health concerns. In making food choices for their children, these mothers did not concern themselves solely with their children's present health, but also planned for their future health. Mother #6 was a Caucasian, married, professionally employed woman who described herself as being overweight; she wanted to teach her children good eating habits that would endure. Mother #6 stated, "So if she likes to eat healthy and it is comfortable for her it will be something that she will make a choice for the rest of her life." The following two mothers who had incomes above the LICO rate had similar comments;

> (Mother #7) If you teach them early to eat the better stuff – make sure they get their fruit and stuff they are more likely to keep that when they get older instead of going to the junk all the time.

(Mother # 18) I guess the future helps me decide what I'm going to prepare; his wellbeing and the future. If he wants to be a good student, healthy and active then I have to think about what I'm putting in his body.

Some mothers expressed concern for their children's future health while recognizing and acknowledging that at this preschool age their children were not always eating healthy. Mothers wanted to do better. They worried and strategized about their children's future nutritional health. Mother #9 was a single, unemployed mother with a preschooler and an infant living below the LICO rate. Her preschooler refused to eat almost any meats, fruits or vegetables. This mother stated,

(Mother #9) "Well I don't want her to have that eating habit for the rest of her life. When she grows up like to be eating like that because it's not healthy. If I can try to get her out of it - it would be great."

Other mothers, whose children were encouraged to eat healthy as preschoolers, also believed that this was the time to teach their children so that they would be more prone to always chose healthier foods. As before, mother #10 a single mother of two who lived below the LICO rate noted,

(Mother #10) Yes, when my kids look and see Sponge Bob or something like that I make sure to show them the difference between the advertisement and the health information or the healthy choice check mark. I try to look out for that. Or I look for low saturated fats. I'm trying to be healthy but I am trying to make them healthy too. So if they acquire it when they are little then they will have it as it grows. I teach them about the healthy check mark I said to [son] see that – that means it is really good for you.

In summary, some mothers in this study were more aware that they lived in an environment that promoted less healthy food choices. In their descriptions of how healthy foods were the most expensive to buy and generally took longer to prepare, how less healthy foods were easy to find, cheaper, and quicker to prepare and how marketing promoted less health foods. They seemed to recognize that they and their children lived in an obesity-producing environment without ever using this term. These mothers were more cognizant and cautious of the need to work against this oppressive force, to make their children aware of it and enable them to oppose it. They strived to ensure that their children would remain healthy into the future. Interestingly, these mothers were not at a stage to request changes to the environment, only to enable their children to resist health negating environmental conditions. It is not surprising that given the work and responsibility inherent in caring for preschoolers that these mothers worked from the home front rather than any political front.

Recreating self. A few mothers in this study were able to view their situation from a broader perspective, encouraging a more critical examination of their role in feeding their children. For some mothers in this study these insights appeared to be more reflective than for others. These mothers expressed dissatisfaction with their actions or their situation and tried to make changes, or recreate themselves. Mother #9 was a 26 year old single, Caucasian mother with a grade 11 education, living below the LICO rate. She had a five year old child and a six month old baby. In our first interview, this mother described her older child as a very fussy eater who ate mostly over processed foods, and foods high in fat, sugar and salt. Mother #9 appeared to develop a greater awareness of her child's poor eating habits while she was speaking with me and when she read over the

typed transcript of our first interview. In our follow-up interview, mother #9 stated that she did not want her baby to acquire the poor eating habits of her older sister and that she really wanted to make some changes even though she knew they would be difficult and her child would be resistant to accepting them. She was hoping to set new feeding goals for her second child.

> (Mother #9) Yeah and the junk foods is going to stop – because I usually have cookies and all that in my cupboard – I'm going to stop buying that altogether and then maybe it might be a battle for a week or so – I mean if it's not there she can't eat it she is going to have no other choice but to eat something else. To try to break her that way because I don't want my youngest to start getting in that habit at all."

Mother #9 seemed to be empowered to initiate changes by telling her story aloud, reading her resultant transcript, and reflecting on her situation. Mother # 3 came to this realization as a young mother trying to cope with caring for her first child. This mother wanted to do better and reached out to the local family resource centre for help. Mother #3 was a single, 23 year old, Caucasian mother with three children. She had a high school education and was living below the LICO rate. Mother #3 had her first child at the age of 19 years; she described knowing very little about feeding her infant and managing money. She considered herself fortunate that she was able to take advantage of the services offered by the local family resource centre. She stated,

> (Mother #3) Family Resource... They're my lifeline. They taught me a lot. I was 19 when I had my son and I didn't really know too much. So I take as many courses there as I can and they answer all my questions for me and help me be the

best parent I can be... They also helped with meal planning and stuff. I took a couple of groups that helped me with that.

(Interviewer) “What kinds of choices did you make before you were given that information?”

(Mother #3) They had sugar juice, they had the processed food. Like I didn't - like I think I knew that like processed foods weren't that healthy but I didn't know how to go about making sure that there would be enough food in my house. So I found it - especially with when I just had my son I was only getting about $400 for a baby bonus and I found it hard to keep enough food in the house for the month for me and him and still pay my bills, my phone, and try to keep a little bit of cable in the house so he would have something to watch. I mean and your power bills- it just was hard to do on $400 so he ate a lot of Mr. Noodle, Kraft Dinner, and a lot of salt. Even I didn't know- didn't realize- I didn't make the good choices when it came to junk food and pop and that.

With this increased knowledge regarding food choices, mother #3 was critical of the financial structures that restrained her food choices. She recognized and acknowledged the disparity between the health messages that recommended what her children should eat and the constraints such as grocery store pricing and social assistance allowances that kept her from consistently achieving this goal. Mother #3 questioned why it was set up so that the healthy choices were the most difficult choices to afford. She stated,

(Mother #3) All the healthy food is just really expensive. It would be nice is if they- just because something is healthy they say you got to have it. They got to

price it up so much because they know you got to buy it. Just like with milk. Like they know that you need it. But they price it right up. You still got to buy it.

(Mother #3)Well if it wasn't so expensive in the grocery store and they wouldn't keep putting everything up. They want your kids to eat a certain amount of each food product in the run of a day but they keep putting everything up and it's like everything is going up and assistance is staying the same. You're not getting any more so you're supposed to stretch your dollar so thin and then that's it - they don't give you enough.

Other mothers who had attended university appeared to have developed a level of health literacy above that of their parents. These mothers were no longer acceptant of the food choices they were given as children and wanted better for their preschool age children. Mother #2, a 40 year old, married, Caucasian mother with three children who lived below the LICO rate, was critical of the food choices she was given as a child. She stated, "I remember going to school and coming home at lunch time and having cheese and butter sandwiches... like who is going to give that to their kids this day and age. We know better". Mother #6, a 40 year old, married, Caucasian woman who worked as a nurse commented,

(Mother #6) My mother didn't know and she still doesn't know. She thinks that she is doing the kids a favour by giving them Fruit Loops and it's hard to convince her that it's not. She feels that they would be deprived if they lived in a world without Fruit Loops or bologna.

As previously noted, recreating one's self while one's extended family stayed the same was a major source of conflict.

In summary, it appeared that these four mothers who represented different income levels, ages, marital status, and education levels were able to view constraining socio-environmental factors and conditions through a deeper, more critical lens. These mothers appeared to have some insight into how relationships of power and underlying social structures operate to oppress and constrain mothers' agency to feed their children well. In *Reflecting Critically* these mothers adopted additional optimizing strategies in an attempt to counteract these forces.

Summary

Strategic Positioning was characterized by an increasing level of reflection or reflectivity by mothers in this study. Through the optimizing strategies of *Compromising*, *Invisible Balancing*, and *Reflecting Critically*, mothers carefully considered their success with managing or moderating contextual constraints and reflected on the next steps or strategies that would get them closer to their preferred food choices for their children. Mothers reflected on the number of choices available to them and made compromises. At times, mothers made a less healthy food choice for their children in an effort to maintain harmonious relations with their child or other family members, or to conserve their income, time, or energy. Following compromises, mothers stayed alert and prepared to take advantage of the next opportunity to give their children a healthier food. A few mothers reflected on how to protect their children's future health by promoting good eating habits at a young age.

Strategic Positioning demonstrated mother's growing sense of agency and individual empowerment. Mothers strategically worked to place themselves in a position to make the best or optimal food choice; mothers were frequently forced to make

compromises in given food choice situations, in response to these compromises, mothers enacted strategies to balance out their children's health over a period of time. Mothers were on a continuum, demonstrating growing levels of personal agency and empowerment. A few mothers with greater personal agency tended to reflect more critically on their situation. These mothers worked to help their children develop skills at an early age to combat health negating social structures and other mothers recreated themselves to make a better or more health conscious future for their children. In Chapter Seven I will explore and discuss how the findings from this study compare and extend the existing literature and theoretical perspectives.

CHAPTER SEVEN: DISCUSSION

In this Chapter, I present a brief overview of the substantive theory of *Persistent Optimizing* and the major conceptual categories that describe the process that mothers living within the CBRM used to make food choices for their preschool age children. I explore and discuss how the findings of this study compare with and extend the existing literature and related theoretical perspectives.

Overview of Persistent Optimizing

Charmaz (2006) defines a substantive theory as "a theoretical interpretation or explanation of a delimited problem in a particular area" (p.189). The substantive theory, *Persistent Optimizing* represents an integrated theoretical rendering of the multiple voices, views, and values of 18 mothers' lived experience of making food choices for their preschool age children. Mothers represented a range of economic, educational, cultural, and geographical backgrounds. Mothers ranged in age from 23-48 with an average age of 30 years, all mothers except one mother with twins had one preschooler at home, 11 mothers were married or living common law, 14 had high school education or higher, 12 were not employed, 10 had incomes below LICO rate and 8 mothers had incomes above LICO rate, 14 mothers resided in a city or town in CBRM. Sixteen mothers were Caucasian and two were Mi'kmaq.

Persistent Optimizing describes the process of how mothers responded to multiple, acknowledged contextual constraints to enhance their ability to provide healthy food choices for their preschool age children on a more consistent basis. *Persistent Optimizing* consists of three main conceptual categories constructed from the data. In the first phase of the process, *Acknowledging Contextual Constraints*, mothers became

increasingly aware of and acknowledged various contextual factors of an individual, interpersonal, and socio-environmental nature that hindered their ability to make intended or preferred healthier food choices for their preschool age children. This category is characterized by feelings of dissonance that motivated mothers to gear up for the subsequent second conceptual category of *Stretching Boundaries*. *Stretching Boundaries* describes how mothers reacted to the dissonance they were experiencing and actively employed a series of moderating strategies to lessen the impact of acknowledged contextual constraints thereby increasing the number of food choices available to them. The third conceptual category, *Strategic Positioning* illustrates how mothers reflected on the options available to them from their success with the moderating strategies they used in *Stretching Boundaries.* They developed and enacted a variety of optimizing strategies to get them closer to making the best or optimal, preferred food choice for their children in a given situation.

Discussion

The substantive theory, *Persistent Optimizing* provides a theoretical rendering of how mothers responded to a variety of complex constraining contextual factors and conditions from multiple levels of influence to enhance their ability to provide their preschool children with intended, healthier food choices. Most studies exploring the food choice decision process have concentrated on how individual adults make food choices for themselves (Connors et al., 2001; Falk, Bisogni, and Sobal, 1996; Furst et al., 1996; Sobal et al., 2006) and have generally approached the topic through pre-formed theoretical assertions, as previously described in Chapter Two. Although many findings of these studies share similarities with mothers' food choice practices they do not account

for the complexities that are involved in making food choices for others and the particular intricacies of the mother-child feeding relationship. Studies that have explored how mothers make food choices for their children highlight a variety of the multiple factors that influence mothers' food choices and the strategies that mothers used to respond to these factors. Some of these include: parental feeding styles and cultural influences (Clark et al., 2007; Patrick et al., 2005: Ventura et al., 2010), income (Attree, 2006; McIntyre & Rondeau, 2009; Williams et al., 2010), time (Jabs et al., 2007; Wethington & Johnson-Askew, 2009; Bava et al., 2008), education (Cribb et al., 2011; Ricciuto et al., 2006) and food marketing practices (Campbell et al., 2006; Hastings et al., 2003).

Persistent Optimizing is original because it takes into account factors from all levels of the socio-ecological model that mothers reported influence their food choices for their preschool age children. Moreover, it explains a process that articulates specific actions and interactions within and among these different levels of influence to explain how mothers make food choices for their preschool age children. Exploring mothers' food choice practices through constructivist grounded theory methodology and a socio-environmental health promotion perspective brought into focus mothers' persistent and generally invisible industriousness to respond and react to multiple and interacting contextual constraints. Many contextual constraints that mothers identified were related to unsupportive environments where access to healthy nutritional choices were limited and shaped by food policies and marketing practices consistent with our present obesity-producing environment (Lobstien, 2008; Saelens et al., 2012; Winson, 2004).

The substantive theory of *Persistent Optimizing* shares some similarities with Gillespie and Gillespie's (2007) family food decision-making conceptual framework.

Using a series of ethnographic studies, which included group interviews and in-depth qualitative interviews, these authors studied groups of families with diverse lifestyles, ethnicities, and socioeconomic status to explore how family eating practices operate within an ecological context. Gillespie and Gillespie identified four stages in their family food decision-making process. In stage one, families identified a food event that required they consider alternatives outside the usual routines and established food rules. In stage two families identified and assessed practical and available alternative choices for meeting their family goals. In stage three families made a decision by evaluating and choosing between possible alternatives and in the final or fourth stage the family implemented their chosen alternative. Unlike *Persistent Optimizing*, in Gillespie and Gillespie's (2007) family food decision-making conceptual framework mothers were not singled out, but were part of the family as a whole in the food decision making process. Families in their study consisted of any configuration of people who regularly ate together, shared household food resources and who mutually influenced decisions about food. The particular make up of each family studied was not described and preschool age children were not mentioned. *Persistent Optimizing,* by focusing on mothers and preschool age children extends and adds nuance to Gillespie and Gillespie's framework.

Persistent Optimizing highlights that choice for mothers in this study was more a contested notion than a straight-forward process. Complex interactions between multiple contextual factors played a significant role in creating the conditions that promoted or inhibited mothers' agency to make intended, healthier food choices for their children. A fundamental feature of the mothers in this study and of Canadian women in general (Statistics Canada, 2010) is their responsibility for caring for their family. To appreciate

the complexities of how mothers engage in the social practice of feeding their children, the role of mothering requires attention. Varcoe and Hartrick (2007) describe mothering as a socially constructed experience that puts the onus for nurturing and sustaining family members disproportionately on women. Women are aware that social expectations hold them accountable for making healthy decisions for their families and mothers take on this as a personal responsibility and accomplishment (Kushner, 2005). According to Kushner, women feel pride and personal satisfaction for having a healthy family. The notion that mothers are responsible for knowing what is best for their children and providing what is needed is widely held. This sense of responsibility can be traced back to the emergence of the dominant motherhood ideology referred to as scientific motherhood. Scientific motherhood is described by Apple (1995) as the insistence that women need expert scientific and medical advice to be capable of keeping their children healthy.

In the mobile and media-dominated culture of the 21st century, many means exist for transferring food culture. Along with scientific advice many competing channels of information, including advertising, sponsorship, formal education, the media, the internet, and peer groups all play a role in moulding one's beliefs about food and health. Today, under conditions of late modernity such as the widening and complexity of consumer choices and an obesity-producing environment, mothers are under additional strain to make the right choices for their children. Lewis (1980) suggests that mothering in modernity, although viewed as the private responsibility of individual mothers, is none the less subject to public scrutiny and intervention where mothering activities are interpreted as good or bad in expert and public discourse. The thought of present and potentially future risk is considered when people make decisions.

According to Lee (2008), mothers seek to rationalize their mothering decisions in response to how they believe a 'good' mother would act in a given situation. In particular, mothers respond to the notion that to do what is good is to avoid doing anything that might be considered unhealthy for their child. Lee suggests that views regarding what constitutes a 'good' or a 'bad' mother are integrally cultural, shaped by larger structural forces and underpinned by a range of classist, racist, and sexist assumptions.

Discourses on mothering tend to hold all mothers to a similar standard without consideration for material resources, social relations, class, or culture, insinuating that when mothers are not able to measure up that they are responsible (DeVault, 1991; Lee, 2008; Varcoe & Hartrick, 2007). Blame is located with the individual rather than the structures that constrain mothers' agency. Mothers are charged with and take on the responsibility of making the good food choices that promote their children's health, but in many situations, choice is mainly an illusion, as they are not socially or structurally empowered to make the desired healthy choices. Mothers in my study expressed caring for their children's health and wanted their children to eat foods that they considered healthy. Similarly, Beagan, et al. (2008) interviewed multiple family members from three ethno-cultural groups in Nova Scotia and other parts of Canada. Like the mothers in my study, who assumed the major responsibility for feeding their children, Began et al. found that Euro Canadian women performed the greater share of food work because it was important to them that their children consumed healthy foods. Mothers in my study experienced varying levels of dissonance when their personal agency to provide healthier food choices for their preschool children on a consistent basis was obstructed by

contextual or structural conditions. Mothers realistically stated that their best intentions to provide healthier food choices for their children were hindered by factors such as a lack of money, time, effort, child food preferences, parenting style, relational conflicts, or food marketing practices. They easily identified contextual factors that impeded their ability to make healthier food choices on a consistent basis.

The mothers' situation is supported by Gidden's (1984) structuration theory that defines human agency as the capacity to act or to independently exercise choice in a given situation. This agency is limited by structural constraints that evolve through the interplay of agency and social structure. According to Giddens (1984), personal agency and structure exist in a reciprocal relationship in which individuals construct their social systems using rules and resources (structures) during interaction (agency). Social structures as rules and resources in which individuals take part during practice, create the conditions of practice that are both constraining and enabling. *Persistent Optimizing* shares similarities with Giddens (1984) stucturation theory where capacity is understood as being limited by structural constraints that come about through the agency/structure interplay. In this study the capacity of mothers to recognize and respond to socio-environmental constraints in food choice situations was also significantly influenced by the resources available to them. According to Giddens (1984), a reciprocal relationship exists between structure and agency; that neither can exist independent of the other. This structure-agency duality implies that social structure does not determine individual action; it is enacted and reified by individuals through the choices they make during social practices, while at the same time, individuals, through their social practices, shape and reshape social structure (Giddens 1984; Hardcastle, Usher & Holmes, 2005).

Delormier et al., (2009) borrowed notions from Giddens' structuration theory to develop a conceptual framework to explore eating as a social practice. Focusing on family feeding practices involving food choice, these authors noted that the conditions in which food choices are made are structured by 'rules and resources' (Giddens) that limit an individual's range of options. *Persistent Optimizing* as an explanation of how mothers make food choice supports Delormier et al.'s (2009) structuration analysis of family feeding practices as mothers' agency to make preferred food choices for their children was influenced by contextual factors and conditions that could be subsumed under Giddens (1984) rules and resources. In this study competing interpersonal and structural constraints including relational conflicts, restrained resources of time and money, and health negating food marketing practices constrained the personal agency of mothers to provide their children with preferred, healthier food choices. The process in which mothers engaged to manage this situation will be discussed under the three major conceptual categories that make up *Persistent Optimizing:* (a) *Acknowledging Contextual Constraints*, (b*) Stretching Boundaries*, and (c) *Strategic Positioning.*

Acknowledging Contextual Constraints

A key finding of this study was that mothers were clearly able to recognize and articulate the multiple factors and conditions that constrained their ability to make preferred, healthier food choices that were consistent with their feeding goals for their children. In particular, mothers acknowledged relational conflicts, restrained resources, and societal deterrents.

For the 18 mothers in this study, feeding their preschoolers was a practice firmly embedded in the flow of everyday life. Contextuality or the "situated character of

interaction in time-space, involving the setting of interaction, actors co-present and communication between them" (Giddens, 1984, p.373) was a significant feature of this study. Contextuality, as defined by Giddens, is consistent with the premises of symbolic interactionism that underpins constructivist grounded theory. The basic premises of symbolic interactionism hold that individuals will act towards things on the basis of the meanings they hold for these things. Meanings of things are derived from social interaction with others and these meanings are dealt with and modified through an interpretive process the individual uses when s/he encounters them in their environment (Blumer, 1969).

Findings from this study suggest that mothers thought about and made food choices for their children from the time they woke in the morning until they went to sleep at night. Consistent with symbolic interactionism, mothers' food choices were influenced by the needs and wants of their children and of other significant family members and friends. Mothers were reactive to the conditions and factors that obstructed and constrained their preferred food choices at home, at the homes of extended family and friends, in restaurants, and in the grocery stores where most foods were purchased.

According to Bourdieu (1990), for much of everyday life, structural and cultural constraints and the actions that follow are often taken for granted and routinized. It is only when the taken for granted is disrupted, when goal-oriented action is hindered, that individual agency comes into play as individuals begin to acknowledge constraints and attempt to find solutions to help them realize or come closer to their goals (Snow, 2001). Consistent with this observation, it was when mothers' goal of providing intended,

healthier food choices for their children was hindered that they began to recognize and acknowledge the contextual factors that constrained their ability to achieve their goals.

These findings describing the contextual constraints that mothers in this study identified confirm and expand existing literature in this area. The food choice process model adapted from other research (Connors et al., 2001; Falk et al., 1996; Furst et al., 1996) illustrated the most important components of food choice construction (Sobal et al., 2006). In developing this model, these nutritionists and social scientists used constructionist perspectives to inductively search for explanations from adults about how they made food choices (Sobal & Bisogni, 2009). Although, not specific to mothers' food choice practices, the food choice process model describes the many factors and types of processes involved in food choice decision making. It consists of three main components: the life course, influences, and personal systems that operate together, overlapping and interacting, when people construct food choices. Food choice values, or the considerations that people feel are important when they make food choices, are included under personal systems. Similar to the findings in this and other studies (Connors et al., 2001) the food choice process model acknowledges health, taste, managing relationships, time/convenience, and cost as primary considerations when making food choices. In this study the considerations or contextual constraints that influenced mothers' food choices were subsumed under three subcategories which included: (a) *Relational conflicts*, (b) *Restrained resources*, and (c) *Societal deterrents*.

Relational conflicts. A variety of interpersonal relationships significantly influenced how mothers in this study made food choices for their preschool age children. For some mothers, negotiating food choices with partners and grandparents was an

important part of the food choice process. For all mothers, negotiating food choices with their children was a significant part of the process. Mothers' food parenting styles influenced their ability to get their children to eat foods that promoted their health. Promoting children's health, accommodating children's food preferences or tastes, and managing relationships will be discussed under relational factors.

Consistent with other studies (Carnell, Cooke, Cheng, Robbins & Wardle, 2011; Connors et al., 2001; Falk et al., 1996; Furst et al., 1996) health was a predominant and permanent consideration for mothers in this study when they made food choices for their children. According to DeVault (1991), almost everyone in contemporary industrial society is exposed to some type of food and nutrition discourse, and many of the tenets have been embraced by mothers. DeVault conducted interviews in thirty households with thirty women and three men. She gathered detailed information on the work associated with feeding a family. In the group of women she studied, almost every mother mentioned the importance of balanced meals, fresh foods, the four food groups, and avoiding junk food, which according to DeVault, are all significant themes in contemporary discourse. Similarly, mothers in this study recognized fruits, vegetables, milk, bread, and some form of meat as healthy; whereas junk foods, take out foods, foods high in sugar or fat, and overly processed foods were considered less healthy.

Although mothers in this study collectively expressed that health was their main consideration when making food choices for their children, on further exploration it was evident that mothers varied greatly in their understanding of health and what constituted healthy or healthier food choices. For some mothers, irrespective of demographic differences, permitting less healthy food choices was more acceptable than for other

mothers in this study. This is consistent with other findings reported in the literature where mothers recounted that their children's health was their main concern when making food choices but then engaged in practices such as offering unhealthy foods, particularly to motivate their children's eating behaviours (Alderson & Ogden, 1999; McGarvey et al., 2006; Moore, Tapper & Murphy, 2010; Morton et al. 1999; Slater et al., 2011; Tucker et al. 2006). In addition, mothers tended to offer foods to their children that they themselves liked (Baughcum et al., 1998; Hoerr et al., 2005). Brewis and Gartin (2006) used semi-structured interviews and consensus analysis with mothers of preschoolers to explore parent feeding versus child eating strategies. Similar to other studies (Alderson & Ogden, 1999; Baughcum et al., 1998; Hughner & Maher, 2006; McGarvey et al., 2006; Morton et al., 1999; Slater et al., 2011; Tucker et al., 2006) they found that although parents wanted their children to eat low sugar, low fat foods, in fact many children were consuming calorie dense foods even when directly supervised by parents. Brewis and Gartin (2006) suggested parental ambivalence about meeting these food ideals in their own diets as one explanation for this finding. They contended that when parents do not practice the food ideals that they advocate, they encourage an environment where non preferred foods are available and where children can exploit psychologically this dissonance to gain access to these foods. Consistent with Sobal and Bisogni (2009), mothers experienced conflict when they were unable to reconcile their preference towards providing their preferred, healthier foods with their ability to do so.

Mothers' ability to get their children to eat preferred healthier food choices was often blocked by their children's preference for particular foods. This is a consistent finding in the literature. Taste is noted as a major determinant of what foods people

choose to eat most of the time (Goldberg & Sliwa, 2011). Taste and other sensory perceptions such as texture, odour or appearance of food are primary considerations and are often used as the minimum criterion for whether or not people will eat or drink something (Falk et al., 1996; Furst et al., 1996; Connors et al., 2001). In this study, mothers' healthier food choices were frequently vetoed by their children who had preferences for more tasty choices that were often lower in nutrient value and higher in calories, fat and salt (APHA, 2005; Colapinto et al., 2007; Davidson & Birch, 2001; Slater et al., 2011).

In addition to being concerned about and attending to the taste preferences of their children, mothers in this study also acknowledged their need to contend with conflicting food values of family and friends. Conflicting food values of family members was previously noted by Jain et al. (2001) who conducted focus groups with 18 low income mothers of preschool children. Similar to the mothers in my study, the mothers in Jain et al.'s study indicated that their authority over their children's food choices was threatened by the child's father or grandparents. Their children who sensed the conflicting views often hastened to these persons who would be more sympathetic towards giving them the treats they wanted. Similarly, managing relationships was a dominant food value in the food choice process model (Falk et al., 1996; Furst et al., 1996; Connors et al., 2001). According to Furst et al. (1996), social factors, or the composition and dynamics of people's social framework such as interpersonal relationships and social roles often raise issues of conflicting priorities, including power issues, when making food choices. Delormier et al. (2009) noted that the rules that govern social interaction and social conduct, or structures of signification and legitimation (Giddens, 1984), enable or

constrain agency during social practice and help to explain the ways in which patterns of food choice are reinforced.

Restrained resources. Power is directly implied in human action; it is the means of getting things done (Giddens, 1984, p. 283). In Giddens' structuration theory the exercise of power relates to structures of domination, which are associated with both allocative and authoritative resources that enhance the ability for social actors to get things done. Allocative resources include raw materials involved in the generation of power such as instruments of production/technology and produced goods obtained from the former (Giddens, 1984). In making food choices, Delormier et al. (2009) included material objects such as money to buy food or transportation to the grocery store, things that agents have control over and can use to get things done. Ten mothers in this study were constrained by a lack of allocative resources; these mothers living below the LICO rate were the most constrained in their ability to make preferred food choices for their children on a consistent basis.

Cost is a pervasive and predominant consideration when making food choices. (Attree, 2006; Broughton et al., 2005; Connors et al., 2001; Falk et al., 1996; Furst et al., 1996; Glanville & McIntyre, 2006; Patrick et al., 2005; Raine, 2005; Williams et al., 2006; Williams, 2009). According to Furst et al. (1996), cost, or monetary considerations, which include the price and the perceived worth of the food to be bought, are significant factors that dominate food choice. Mothers in this study who lived below the LICO rate recognized that with their present income, they could not always provide nutritious food choices for their preschool age children. These mothers frequently described having to make do with less acceptable food choices. Similar to the findings of earlier studies,

children of mothers with incomes below the LICO rate were often deprived of more costly, nutritious foods and tended to consume less costly, items that were high in sugar, salt and fat (Bowman & Harris, 2003; Broughton et al., 2005; Gable & Lutz, 2000; Patrick et al., 2005; Raine, 2005). An important outcome of this situation is that these children are at greater risk for becoming overweight and obese and for developing nutrition-related chronic diseases (Dubois et al., 2006; Statistics Canada, 2002). Mothers in this study who were living below the LICO rate recognized their financial constraints and worried about whether their children were getting enough healthy foods. These mothers were forced to plan more effectively and to work harder every day to increase their children's ability to eat healthier foods. This was particularly true for mothers with restrictive feeding goals who were dedicated to providing healthier foods on a more consistent basis.

Consistent with previous findings (Bava et al., 2008; DeVault, 1991; Devine et al., 2006; Jabs & Devine, 2006; Slater et al., 2011; Wethington & Johnson-Askew, 2009) and the findings of the food choice process model (Connors et al., 2001; Falk et al., 1996; Furst et al., 1996) convenience, which includes the time and effort expended to prepare and serve meals, was also a consideration for mothers in this study. According to Sobal et al. (2006), individuals make personal judgments regarding whether they feel that expending the required time and effort is worth the benefits of the particular food or drink. The effort required by some mothers in this study to prepare food was impaired by their self-described poor cooking ability. According to Lang and Heaseman (2004), not being able to cook increases people's dependency on whatever others or the food industry provides for them. These authors suggest that food culture then becomes a dependency

culture diminishing individual agency to make choices. Indeed, for the mothers in this study who described themselves as poor cooks, the time and effort to prepare a meal was even more taxing. This type of personal judgment by mothers regarding food preparation represents a shift from earlier findings. DeVault (1991), who collected her data in the early eighties, found that women generally described cooking skills as instinctual or appearing automatically once one became a housewife, and that planning was not necessary, that everything was routine 'just what comes natural'. In contrast, women in this study and in another recent study (Bava et al., 2008) did not acknowledge that food preparation on any level came easily or was instinctual. Mothers freely admitted that the work of food preparation was hard, it was a struggle and they were always second guessing their ability. DeVault (1991) argued that the activities of feeding a family are not instinctual, but rather are socially organized and their logic is learned. DeVault (1991) reported that these earlier types of comments from women in her study point to the real characteristics of feeding work: "its invisibility, its improvisational character, and its basis in a tacit, rather than a fully articulated kind of knowledge" (p.48).

Societal deterrents. In purchasing foods for their family, mothers confronted food marketing practices that constrained their ability to provide healthier food choices for their preschool children. DeVault (1991) contended that when shoppers engage the market as context they enter a type of struggle. They must deal with the excess of products and information around them, and with fundamentally antagonistic marketing techniques designed to influence their purchases. DeVault described the shopping experience as a "complex, artful activity that supports the production of meaningful patterns of household life by negotiating connections between household and market"

(p.59). The power to get things done, such as purchasing food for the family, requires having sufficient allocative and authoritative resources (Giddens, 1984). Authoritative resources include the life chances open to an individual and one's individual capacities such as communication skills, interpersonal relationships, and the organization of social time and space which permit the exercise of power in relation to others (Giddens, 1984). According to Delormier et al. (2009), authoritative resources include being able to choose what family members eat; this power to choose is limited when these resources are lacking. De Vault (1991) proposed that for mothers, particularly those with inadequate resources, shopping can be a sobering and frustrating task. These findings were confirmed and extended in this study.

Mothers in this study with less authoritarian feeding practices and those with limited material resources were the most challenged when it came to navigating the health-negating, obesity-producing (Winson, 2004) food marketing practices that permeated the grocery stores. Similar to other findings from a systematic review of peer reviewed international evidence on this topic (Mc Dermott et al., 2006) children's pestering for less healthy foods in the grocery store was a constant source of stress for mothers. Mothers with limited authoritarian food parenting practices were more challenged to resist these requests and consequently ended up purchasing less healthy food items that increased their children's risk of becoming overweight.

Mothers in this study with low allocative resources, and who lived below the LICO rate were not able on a consistent basis to purchase healthier foods as these foods were frequently more expensive than the aggressively promoted, obesity-producing, highly processed foods and high fat/high sugar "pseudo foods" abundant in supermarkets

(Winson, 2004). This finding is well noted in the literature (DeVault, 1991; Glanville & McIntyre, 2006; McIntyre et al., 2003; Ricciuto, et al., 2006 & Williams et al., 2006; Williams, 2009).

In summary, there were a variety of relational, resource related, and societal factors that mothers in this study acknowledged that constrained their ability to provide their preschool age children with food choices that were consistent with their feeding goals. Individuals or agents acting in the food choice environment are guided by their frame of reference or their knowledgeability (skills, beliefs, experiences) to make the most adequate food choice for that moment (Delormier et al., 2009; Giddens, 1984). Mothers in this study acknowledged that they were not always able to meet their ideal of providing foods that promoted the health of their children. Mothers were constrained by interpersonal dynamics; they were challenged to negotiate food choices with their preschool age child who was growing in independence and in their ability to express their own particular food preferences. Mothers' food parenting practices were instrumental in getting their preschoolers to eat healthier foods. Moreover, mothers were constrained by the prohibitive cost of healthy foods, particularly mothers whose incomes were below the LICO rate. Finally, all mothers were challenged by time scarcity and pervasive food marketing practices that constrained their agency to make their preferred choices. These constraints heightened mothers' feelings of dissonance. Mothers with restrictive feeding goals who wanted to severely restrict their children's access to unhealthy foods experienced dissonance more often than mothers with more liberal feeding goals who felt it was alright for their children to eat varying amounts of less healthy foods. According to Festinger (1957), dissonance increases in response to the degree of importance one

attaches to an issue or the strength of the conflict between the dissonant thoughts. Mothers in this study who did not believe that less healthy foods were harmful for their child were more willing to offer these foods. Given that constraints such as family conflicts, money, time, food advertising, and children's food preferences make it easier to offer less healthy food choices, these mothers tended to fall more easily into this trap, to the potential detriment of their children's nutritional health and their risk or tendency to become overweight. In these mothers' eyes they were still doing their best. Even while permitting less healthy foods they tried to get a few healthy food choices in on most days and described being very pleased when their child ate a healthy food or drank a nutritious beverage. Mothers with more restrictive feeding goals described their feeding work as "a battle", "a lot of work." They were in competition against a culture and a society that normalized these childhood eating practices, and against a food industry that encouraged and advertised foods to children that were often less healthy and obesity-producing. Mothers who felt the greatest need to restrict their children's access to less healthy food were challenged to remain vigilant at all times to confront the constraints that limited their agency to provide these choices.

Acknowledging Contextual Constraints, the first conceptual category of *Persistent Optimizing*, set the stage for mothers' food choice practices. The process in which mothers engaged to provide preferred, healthier food choices for their children was in direct response to the contextual factors constraining their choices and the subsequent dissonance they experienced. These contextual constraints forced mothers to develop and implement strategies to increase their ability to make the best food choice for their child in any given situation.

Stretching Boundaries

Individuals, although oriented to act in ways that are practical and appropriate, do not simply react to social structural constraints. According to Giddens (1984), they interact through their agency, in a range of socially structured conditions. Sobal et al. (2006) suggest that people make their food choices by considering their resources and excluding options that are not accessible to them given their existing resources. Furst et al. (1996) contend that people's perceptions of what is available to them demarcate their boundaries in food choice situations. In *Stretching Boundaries*, mothers reacted to the contextual factors and conditions that hindered their ability to reach their intended feeding goals for their children. To stretch the boundaries of the food choices available to them, mothers developed and enacted a variety of moderating strategies to moderate or lessen these constraining factors. In this way mothers increased their agency to make choices. This type of reactivity is consistent with Bandura's (2008b), third core property of human agency, self-reactiveness where individuals construct appropriate courses of action to motivate and regulate the execution of their goals. When individuals reach the stage of self-reactiveness they generally have accomplished the first two core properties of human agency; intentionality and forethought (Bandura, 2008b). They have formed specific intentions for what they want and they have exercised forethought in that they have set their own goals and have anticipated possible outcomes for their future actions (Bandura, 2008b). In *Persistent Optimizing* mothers set out with the intention to do their best to provide their children with healthy food choices. During *Acknowledging Contextual Constraints* they considered their intentions and their feeding goals and acknowledged the factors and conditions that hindered these. In *Stretching Boundaries*

mothers reacted by enacting deliberate, moderating strategies to negotiate, to deal with, or to get past the constraints that hindered their ability to provide food choices that promoted their children's health. Consistent with Bandura's (2008b) core property of human agency, self-reactiveness, some mothers in this study engaged in a high degree of self-regulated effort in an attempt to translate their feeding goals into reality.

Mothers used moderating strategies in *Stretching Boundaries* to increase their chances of meeting their primary feeding goals in different situations. According to Bandura (2002), personal goals, which are rooted in a value system, provide incentives and guide people's actions. Accordingly, once people adopt personal standards they act in ways that enhance their self-satisfaction and self-worth and diminish their self-reproof. This was evident in this study. When mothers were unable to make food choices for their children that were congruent with their primary feeding goals and personal expectations, they experienced dissonance. To combat this dissonance they intentionally enacted strategies to position them closer to their goals, thereby increasing their self-satisfaction and agency and lessening their self-reproof.

In recognizing the factors and conditions that limited mothers' ability to make preferred, healthier food choices and deliberately directing their energy to lessen these constraints, mothers were demonstrating an increasing level of critical awareness consistent with a growing sense of personal agency. Critical knowledge in health promotion is concerned with raising individual and group consciousness regarding the causes of problems and what can be done to counteract these problems to improve health (Raphael, 2000). In this study, it was mothers' degree of critical awareness and their personal agency that gave them the freedom to move in different directions, to negotiate

the constraints they encountered. Not all mothers were afforded the same degree of movement. Moderating strategies used by mothers in *Stretching Boundaries* included (a) *Advancing healthy food choices,* (b) *Managing resources*, and (c) *Minimizing environmental deterrents*.

Advancing healthy food choices. The first set of moderating strategies that mothers used in *Stretching Boundaries* were related to advancing food choices that promoted their children's health. Mothers tried many tactics to get their children to eat less preferred healthier foods such as vegetables. Mothers tried creatively to hide vegetables in mashed potatoes; they involved their children in food preparation and attempted to make foods visually more appealing to children. Consistent with this finding, Tucker et al. (2006) found that parents creatively prepared foods to make them more appealing to children. These authors concluded that this was an effective strategy towards increasing children's healthy eating. In contrast, Noble et al. (2007) found that although mothers attempted to be creative to encourage children to eat vegetables, they were not always successful, which increased mothers' belief that getting children to eat vegetables was a losing battle. Both of these scenarios were described by the mothers in my study. Although these techniques were not always successful, mothers claimed that they kept trying because every now and then, they did work.

Despite the fact that mothers in this study stated that promoting their children's health was their major consideration when making food choices, they all permitted to some extent less healthy take-out items and less healthy foods that their children enjoyed. These foods were often given as rewards. Mothers had different strategies to regulate their children's consumption of less healthy foods. Morton et al. (1999) qualitatively

investigated the attitudes of 27 mothers towards regulating snacks for their two year old children. Similar to this study, mothers wanted their children to eat healthy foods, but felt that less healthy snacks were important as children enjoyed them. In addition, Morton et al. found that all mothers placed some type of restriction on snacking. In particular, mothers ranked snacks and tried to offer ones that were perceived to have less sugar and were therefore healthier. Particular snack foods were strictly forbidden in some homes. This finding is similar to some mothers in my study who did not allow their children to drink soft drinks. Similarly, there were mothers in Morton's study who hid foods such as chocolate and ate them when the children were in bed. Freeman, Ekins, & Oliver (2007) conducted focus groups with parents and their children to generate an emerging theory of snack regulation. Using grounded theory techniques they found that parents used a behavioural strategy of policing to do their best for their children by regulating their 11 year old children's snacking practices. Parents' resourcefulness at balancing contextual constraints influenced the style of policing. Similar to this study, some parental policing or monitoring efforts were more effective than others in limiting their children's intake of less healthy foods. The substantive theory of *Persistent Optimizing* supports and extends aspects of the theory introduced by Freeman et al. (2007). In Freeman's study, as in my study, the core variable was mothers doing their best to counteract the contextual constraints that limited their ability to get their children to eat preferred, healthier food choices on a more consistent basis. A differentiating factor was that Freeman et al. studied mothers with 11 year old children whereas this study dealt with mothers of preschool age children. Limiting children's access to foods high in sugar, fat, and salt is important as children's exposure to these foods develops their palates to these tastes and

increases children's preferences for these foods, potentially setting them up for food preferences that could increase their risk of becoming overweight or obese (Hughner & Maher, 2006; Musher-Eizenman, Lauzon-Guillain, Holub, Leporc & Charles, 2009; Tucker et al., 2006).

Mothers enacted a variety of strategies to deal with family members and friends who wanted to offer more treats than they were comfortable with their children having. Mothers were placed in the difficult position of maintaining family harmony while also attempting to promote their children's health. Mothers keeping the peace, or accommodating the food preferences or demands of other family members over their own preferences or needs has been previously noted (Bevan & Reilly, 2011; Blake & Bisogni, 2003; Brewis & Gartin, 2006; Noble et al., 2007; Slater et al., 2011). Bevan and Reilly (2011) applied an action research approach to explore the challenges and the strategies that 17 middle class, Caucasian mothers used to provide good nutrition and physical activity opportunities for their preschool children. Similar to this study, mothers reported that friends and family sometimes interfered with their efforts to provide a healthy lifestyle for their children. One mother in their study reported that "sometimes your best efforts are just thwarted." This sentiment was consistent with the statements that mothers in this study expressed. In addition, mothers' emphasis on 'doing one's best' to provide healthy food choices for their preschooler (Bevan & Reilly, 2011) supports the premise of *Persistent Optimizing*.

In this study the conflict between mothers and grandparents regarding child feeding was a problem specific to more highly educated, professionally employed women who were economically stable. This may indicate that these mothers had developed a

greater level of health literacy than grandparents, allowing for greater autonomy and personal empowerment (Nutbeam, 2000), thereby increasing their ability to make positive choices from the options available. Concurrently, these mothers in this study might also have moved into a different socio-economic status than their children's grandparents and no longer shared the same rules about what foods were healthy or appropriate for preschoolers. According to Bourdieu (1984), the further away a person is from foraging for economic necessity the greater their time and ability is to adopt tastes or choices more in line with a more privileged socio-economic status. The life chances (Cockerham et al., 1997) of the mothers in this study may have been greater than their parents or in-laws, which provided them with more options and greater freedom to choose. Link and Phelan (2000) noted that individuals from the upper and middle classes are generally the first to have knowledge of new health risks. Moreover, because they have greater resources they are the most able to adopt new health strategies and practices. They reported that these new health strategies often conflicted with the traditional practices of their partners, parents, and friends presenting additional stress for mothers.

Consistent with other findings (Bevan & Reilly, 2011; Connors et al., 2001; Falk et al., 1996; Furst et al., 1996; Slater et al., 2011) mothers in this study strove to maintain family harmony and were generally attentive and considerate to the nutritional needs, preferences, and feelings of those to whom they served food. The additional role of maintaining peace with extended family and friends with which mothers in this study contended when feeding children was not strongly identified in most studies that were reviewed. This finding expands and adds nuance to the literature in this area.

Managing resources. The second set of moderating strategies that mothers used in *Stretching Boundaries* were related to maximizing the money, time, and energy they were able to invest in feeding work. Many of the strategies that mothers with incomes below the LICO rate used to provide food for their children were consistent with previous findings. Attree (2005) carried out a systematic review of qualitative studies that prioritized low income mothers accounts of managing in poverty with a focus on diet, nutrition and health in poor families. One of the main concepts identified by mothers in her study was termed strategic adjustment to poverty. This concept described how food choices made by low income mothers were constrained by limited material resources. Similar to the findings in this study mothers who managed on a low income were less able to buy healthy food such as fruit, vegetables and meat. These more expensive items were bought less frequently to conserve money. In addition, the mothers in the studies that Attree (2005) reviewed and the mothers in this study used 'focused shopping', making lists and buying a week's or a month's worth of groceries in advance to avoid impulse purchases. Mothers shopped around for the best food bargains, which usually meant mothers had to expend greater time and effort to use coupons and search for cheaper goods. Mothers living in rural areas were often at a greater disadvantage to purchase bargains due to limited public transport. Travers (1996) noted that low income women experience particular difficulties when buying groceries as supermarkets are designed more for people with money, with cars, with child care and with storage space to stock up on specials.

Some mothers in this study who were not living below the LICO rate also described some degree of shopping around or using coupons but they were not as bound

to this process as mothers living below the LICO rate. Mothers below the LICO rate had to stay vigilant and to work tirelessly to keep food in the home. There was no rest from the constant monitoring of food supplies, the planning of meals, searching for bargains and finding coupons. As noted by DeVault (1991) finding coupons or bargains can look to the outsider as simply reading the paper. She comments that the tedious work is not noted until one runs out of milk--the work has not been completed. This type of work cannot be seen when it is done well. To add to and perpetuate this predicament most social programs and policies are based on calculations that assume that mothers will be smart shoppers who will be able to make their money go further. Mothers are held responsible to do this extra work, irrespective of their circumstances and individual differences (DeVault, 1991).

Mothers in this study were challenged by not having the time or the energy on a consistent basis to carry out the multitasked work of preparing healthy meals for their preschool age children. Convenience, as a value in the food choice process model represents the actual time, ability, mental and physical involvement to acquire, prepare, consume, and clean up after eating or drinking (Falk et al., 1996; Furst et al., 1996; Connors et al., 2001). Given the complexity and time requirements of feeding work, mothers were compelled to find strategies that made the most of the time and the effort they had in each particular situation. This is a consistent finding in the literature. (Bava et al., 2008; Bevan & Reilly, 2011; Jabs et al., 2007; Jabs & Devine, 2006; Wethington & Johnson-Askew, 2009).

Jabs et al. (2007) conducted semi-structured in-depth interviews with 35 low-wage, employed mothers to explore how these mothers constructed time for food

provisioning for themselves and their families. These authors noted that feelings of time scarcity and strain were common for mothers. Mothers in their study used similar strategies to deal with time scarcity as mothers in this study. They described planning and preparing meals on weekends to use during the week, picking up something quick on the way home from work, frying foods and using 'instant box stuff' that was less healthy but saved time. These mothers acknowledged not being able to always make the meals they wanted for their children due to time constraints. One mother commented on trying to do the best to give her children a good meal but consistent with findings in this study, sometimes it just takes too long. Bava et al. (2008) also noted that issues such as time pressures, unpredictability, and limited cooking abilities constrained women's ability to make preferred meals. Wethington and Johnson-Askew (2009) reviewed key concepts comprising the life course perspective as it applies to food decision making. Again, these authors noted that time scarcity compromised mothers ability to provide healthy meals for their children on a consistent basis. To deal with the competing demands of commuting, children's activities, homework and leisure time, parents sometimes resorted to using less healthy prepared foods, take out and fast foods. Similarly, Slater et al. (2011) found that constraints including lack of time and increasing children's food autonomy resulted in mothers not being able to provide preferred, healthier home cooked meals. To cope; mothers often relied on processed convenience and fast foods thereby reinforcing structural food norms within the family and within the retail grocery stores that distribute these foods. These highly processed foods in the market are generally high in salt, fat and sugar, and low in fibre. Unfortunately children's exposure to these foods may enhance their preference for these fast, calorie dense foods and consequently their

risk of becoming overweight or obese (Hughner & Maher, 2006; Musher-Eizenman, et al., 2009; Tucker et al., 2006).

Minimizing societal deterrents. Mothers in this study confronted many food marketing practices in the grocery store that challenged their ability to buy foods that promoted their children's health. Mothers generally had their preschoolers with them when they shopped for groceries, as getting a baby sitter was inconvenient and costly for a task that was so frequent. Mothers created strategies to deal with their children's pestering for less healthy, often more costly, food choices that were designed to attract and tempt children. Pestering, according to McDermott et al. (2006), directly contributes to mothers buying foods that are less healthy and that are associated with increasing children's risk of becoming overweight. In addition, mothers in this study strategized to increase their ability to purchase some of the healthier food choices such as milk, fruits, and vegetables that were often the more expensive items in the grocery store.

Purchasing healthy foods was a particular source of strain for mother's living below the LICO rate. DeVault (1991) reported that for individuals with low resources shopping can be a cruel task, laden with anxiety and frustration. According to DeVault, shoppers are forced to deal with the fact that the range and character of products on the market are based on corporate decisions with little regard for basic household needs. Similar to the finding in this study reflecting mothers growing level of critical awareness, DeVault observed that shoppers were aware of some of the economic forces shaping the market, hinting at ways the stores were inadequate. De Vault acknowledged that few people think much about these problems, that they have mostly found "good enough" strategies that work for them and are generally absorbed in the everyday work of *making*

the market suffice. Hawkes (2008) carried out a comprehensive literature review to explore the nature of supermarket development and the relationship between supermarkets, food access, availability, prices, diets and obesity. On a positive note she found that supermarkets increase the accessibility and availability of a variety of foods. On a negative note she confirmed that supermarkets decrease the capacity of marginalized populations to purchase a high quality diet, while encouraging the consumption of energy dense, nutrient poor, highly-processed foods.

In summary, the moderating strategies in the emergent theory *Persistent Optimizing* are supported by the literature. Indeed, the findings of the present study expand on some results previously put forward, add deeper understanding to others and add nuance to what is already known. Particular to *Persistent Optimizing*, the strategies mothers used in how they made food choices stemmed from interplay between mothers' agency and acknowledged contextual constraints. The strategies that mothers used in this study were not new, as noted in the literature most of these strategies have been previously described. What this study adds is an original way of looking at these strategies, to view them as moderating strategies because they are moderating the impact of negative forces on the mothers' capacity to make healthier food choices. Mothers therefore used these strategies to stretch the boundaries of the food choices available to them, enhancing their agency by placing them in a stronger position to make preferred, healthier food choices for their children. Overall, mothers' success with using moderating strategies provided them with their range of choices. For example the mother who took time on the weekend to prepare and freeze meals was better positioned to offer a healthy meal during the week when evening schedules did not permit this option; mothers living

below the LICO rate who closely monitored their food supplies, shopped for bargains, used coupons, and stocked up on sale items had more money to make preferred food choices than mothers who did not use these strategies. Without these daily moderating strategies mothers' agency to make choices was more limited.

According to Browne (2000), individual and group critiques of existing social conditions can act as a stimulus for individual and collective enlightenment, empowerment, and emancipation. Habermas (1972, 1984) contends that when people are able to uncover and challenge both recognized and undisclosed constraining social, political, and economic conditions that limit their freedom and to discover ways to counteract these constraining conditions then they are taking part in an emancipatory process. Mothers' use of moderating strategies in this study reveals their insight into the multiple factors and conditions that constrained their choice and their ability to use this insight to enact strategies to counteract these forces. Mothers' accounts revealed their growing level of critical knowledge and their developing personal power or agency.

Strategic Positioning

Strategic Positioning was the final category in the process of *Persistent Optimizing*. In review, mothers acknowledged contextual constraints, following this they developed and enacted moderating strategies to stretch the boundaries of their food choices. Once they had exhausted their use of moderating strategies they were left to reflect on and choose from the food choices available to them. In *Strategic Positioning* mothers were more reflective, enacting a variety of optimizing strategies to make the best or optimal choice from among the range of existing options. The reflection mothers demonstrated in *Strategic Positioning* is consistent with Bandura's (2008b) fourth core

property of human agency, self-reflectiveness where individuals reflect on their personal efficacy, the soundness of their thoughts and actions, and the meaning of their goals and make adjustments as needed.

According to Giddens (1984), individuals' knowledgeability or their knowledge about the circumstances and consequences of self and others' actions enhances their agency; at the same time, there is a great deal individuals do not know about the conditions and consequences of their activities that also influences their actions. Giddens contends that knowledgeability "is always bounded on the one hand by the unconscious and on the other by unacknowledged conditions or unintended consequences of action" (p.282). According to Giddens, individuals possess different levels of awareness that affect how they act in the world. In differing contexts individuals switch between practical consciousness, which he describes as their use of practical knowledge and skills or routine practices, to discursive consciousness, which is their ability to reflect on and comment rationally on their behaviour. In *Stretching Boundaries* mothers reacted to constraints on a more visceral level using practical knowledge and skills, there was some evidence of discursive consciousness as mothers were able to comment on why they were using particular moderating strategies. In *Strategic Positioning* mothers demonstrated a greater level of discursive knowledge as they were challenged to reflect on their successes in using moderating strategies to determine which food options were available to them and which food choice would be the best in a particular situation. Giddens concludes that shifting from one mode of consciousness to another enhances individuals' agency to reflect on and monitor one's own behaviour. Giddens suggests that reflexive monitoring is a persistent feature of individual's everyday action.

Mothers' increasing reflection or reflectivity was a predominant feature of *Strategic Positioning*. Optimizing strategies used by mothers in *Strategic Positioning* included: (a) *Compromising*, (b) *Invisible balancing*, and (c) *Reflecting critically*.

Compromising. In *Compromising* mothers paid particular attention to their food preferences for their children, their resources at any given time, and to the people that mattered most to them. Compromising or trading off is a strategy that has been previously noted in the literature related to making food choices (Bava et al., 2008; Connors et al., 2001; Furst et al., 1996; Slater et al., 2011; Sobal et al., 2006; Sobal & Bisogni, 2009). Within the food choice process model (Falk et al., 1996; Furst et al., 1996; Connors et al., 2001) people are often faced with having to make compromises between conflicting food choice values. For instance, similar to findings in this study, mothers may compromise between a value such as cost of food over another value such as the health of food (Attree, 2006; Broughton et al., 2005; Gable & Lutz, 2000; Patrick et al., 2005; Raine, 2005), or they may choose to maintain family unity and cooperation at meal times over struggling to get their children to eat more nutritious foods (Brewis & Gartin, 2006; Bevan & Reilly, 2011; Slater et al., 2011).

Bava et al. (2008) used repeated semi-structured interviews, participant observation, diaries, and media analysis over a three month period with 11 women to explore food provisioning practices within women's lives. Similar to the findings of my study, these authors noted that issues such as time pressures, unpredictability, and limited cooking abilities constrained women's ability to make preferred meals. To deal with these constraints women enacted trade-off strategies such as offering convenience food over healthier meals that required more time and skill to prepare. These authors

contended that these trade-off processes represented constrained choice; challenging once again the notion of free choice.

Invisible balancing. According to Bandura (2008a), individuals reflect on their personal efficacy, or their personal belief in their ability to succeed in specific situations; they consider the soundness of their thoughts and actions and the meaning of their goals and make any necessary adjustments. *Invisible balancing* describes the necessary adjustments or the strategies that mothers engaged in to counteract the compromised food choices they believed were necessary to make. In my study mothers tended to deal with food choices that compromised their desire to provide healthier food choices for their children with strategies that allowed mothers to balance their children's health over a period of time. Balancing as a strategy used to resolve food choice value conflicts is noted in the literature (Connors et al., 2001; Falk et al., 1996; Furst et al., 1996; Gillespie & Gillespie, 2007). Connors et al. (2001) provides the example of balancing a healthy food with a less healthy food during a meal or over a day or throughout a week. These findings are consistent with the findings of this study. According to Sobal et al. (2006), individuals develop their own way of making sure that all their important values are met in their food choices. To do this individuals balance their choices over particular time frames, eating occasions, places or eating partners (Connors et al.; Sobal et al.).

Reflecting critically. All mothers in this study were able to acknowledge the structural or contextual factors and conditions that limited their ability to make preferred, healthier food choices for their children. A few mothers were able to see beyond these constraints to more critically view some of the invisible forces that created and sustained these barriers. These mothers recognized that the food environment was slanted towards

making a profit rather than promoting health. For over twenty years it has been alleged that industry, through its manufacture and distribution of a variety of products generates at risk behaviour and disease (McKinlay, 1990). In relation to children's health, Kersh and Morone (2005) contend that the powerful food industry is organized to push even more calories onto the consumer in the form of hidden ingredients such as sugar, salt, and fat, increased and super-sized portions, relentless advertising, and the ubiquity of low-nutrient, energy-dense foods and beverages. The global economy that we live in is filled with an abundance of food choices. According to Heron (2008), globalization is supported and promoted by a neoliberalist ideology where power is transferred from labour to capital and from state to market and international financial institutions; individuals are locked out of major decisions that affect their wellbeing. Without articulating this in this way, the mothers who reflected more critically on their food choice practice were aware that the environmental conditions were not designed to promote or protect their children's health; they recognized the need to work against this force. Particular to *Persistent Optimizing*, mothers' food choice process included enacting strategies to assist their preschool age children in developing good food habits at any early age so that they would be better able to resist the unaccommodating food environment that slanted food choices in an unhealthy, obesity-producing direction.

Some mothers in this study resisted dominant forces by attempting to recreate themselves. They acknowledged that they were not able to feed their family well on their social assistance allowances. Some mothers set out to take classes to learn to stretch their meagre income. As described in Chapter Five, all mothers living below the LICO rate enacted various strategies to make their money go further. One mother blamed the system

for not providing adequate resources. This mother, although not articulating this explicitly, appeared to have some insight into the present political climate in Canada. This political climate has been described as one that supports program reductions, limited eligibility for a variety of benefits, and a shifting of balance in favour of the business sector rather than institutions associated with civil society (Hofrichter, 2003; Raphael, et al., 2007; Robertson, 2000).

Strategic Positioning described the optimizing strategies that mothers used to make food choices from the options available to them through their success at *Stretching Boundaries*. Mothers used these strategies in combination to place themselves in a position to make the best or optimal food choice for their children on a more consistent basis. To make preferred food choices mothers needed to acknowledge constraints and to develop particular strategies, both moderating and optimizing, that worked for them in a given situation. In their use of optimizing strategies in *Strategic Positioning* mothers demonstrated both practical consciousness and discursive consciousness (Giddens, 1984). Giddens concludes that shifting from one mode of consciousness to another enhances individuals' agency to reflect on and monitor one's own behaviour. Mothers' increasing reflection or reflectivity was a predominant feature of *Strategic Positioning*. Mothers needed to constantly monitor their behaviour; in particular they had to be aware of the options they opened up for themselves through their success at *Stretching Boundaries*. Their success positioned mothers closer to being able to make their preferred, healthier food choices on a more consistent basis. If mothers were not successful, they were challenged to reflect on their goals and make changes or develop new strategies to help reach them.

Giddens (1984) describes this type of continuous monitoring by individuals of their activities, and the routine monitoring of aspects of their social and physical contexts in which they move as reflexivity. Giddens suggests that reflexive monitoring is a persistent feature of individual's everyday action. Similarly, Bandura (2008b) describes self-reflectiveness, or the metacognitive ability to reflect upon oneself, as the most distinctly human core property of agency. In this study mothers' agency was enabled when resources were high and constrained when resources were low. Through acknowledging constraining social structures and monitoring the impact of strategies to counteract these constraints, mothers in this study developed insights and skills that enhanced their agency and empowered them to provide food choices that reflected their primary feeding goals on a more consistent basis. A few mothers increasing reflection or reflectivity permitted them to see beyond their everyday action of pushing against barriers to feed their children to the forces or unequal powers that supported these barriers.

As mothers processed through the conceptual categories of *Persistent Optimizing* they demonstrated to varying degrees increasing levels of deliberation, reflection, and discursive consciousness. In this way mothers gained increasing degrees of personal agency and empowerment in their success at meeting their primary feeding goals for their children. All mothers increased their sense of agency and were empowered by recognizing constraining factors and creatively negotiating them to reach their feeding goals. Mothers used various strategies to accomplish this; some took classes, some regularly dialogued with other mothers to find the best deals, and others risked being the unpopular family member for insisting that their children eat well. All mothers were

motivated by their concern for their children and their commitment to promoting their children's health to create possibilities and take action to help them reach their feeding goals.

Summary

Persistent Optimizing highlights the persistent, relentless, reflective work that mothers engaged in on a daily basis to increase their ability to make preferred, healthier food choices for their preschool age children on a more consistent basis. A strength of *Persistent Optimizing* is that it makes visible the dynamic process of mothers' feeding work with their preschool children, including its many intersecting dimensions and strategies that are frequently invisible. It highlights the repertoire of strategies across a continuum that mothers developed and enacted to constantly push back against the myriad of contextual conditions and factors that constrained their ability to make preferred, healthy food choices. This substantive theory captures and organizes the many aspects of mothers' food choice practices that must be in place for them to be successful in obtaining their preferred food choices. Mothers' ability to exercise food choices in any given situation was determined by mothers' degree of personal agency, their ability to stretch the boundaries of food choices available to them, and to position themselves closer to their preferred food choices. In addition, *Persistent Optimizing* explicates the actions and interactions occurring between different levels of influence that affect mothers food choice practices. All mothers in this study were not the same; mothers had varying interpersonal skills that influenced their agency to interact with significant family and friends and respond to health-negating food marketing practices. They had varying amounts of valuable resources, such as time, and more importantly, money. Also,

mothers had diverse opinions of what constituted a healthy diet for their preschool age children. They possessed different food parenting styles that affected their ability to influence their children's eating patterns. Mothers with limited authoritative and allocative resources had less agency to make preferred choices and frequently had to make do with food choices that were not health promoting.

In general, mothers in our North American society with limited resources are held to the same standard to provide healthy food choices for their children as mothers with sufficient resources. Mothers' personal expectations and enduring social expectations of motherhood hold them responsible for keeping their children healthy. If mothers are not able to do this, the individual rather than the structures that constrain mothers' agency are often blamed. This is problematic in that in any society, structural factors shape the everyday lives of individuals, while the everyday practices of individuals shape those same larger structural forces. In accordance with Giddens' (1984) structuration theory on the interconnection of human agency and social structure, the repetitions of the acts of individuals reproduce the structure.

In this light, the food choice practices in which mothers engaged in *Persistent Optimizing* had the potential to reproduce and perpetuate the social and political structures that they worked so hard against. A risk to putting forth this substantive theory is that it demonstrates mothers' persistent industriousness and creative resourcefulness in dealing with the socio-environmental factors that limit their choices and thus, may be used as evidence to suggest that mothers are adapting and system change is not needed. In this study, mothers' individual agency was pitted against the socio-environmental forces they could identify and acknowledge. Mothers were less aware of the power

relationships and the neo liberal market-oriented political ideologies that shaped these social structures. Mothers tried to solve their problems from the home front. They used their wits and their resources to push against or circumvent the structures that made the healthier food choices the most difficult to attain. Often tired and frustrated they purchased the overabundant, low priced, convenient, highly advertised, obesity-producing foods and thus unknowingly proliferated the demand for these products.

Furthermore, mothers who lived below the LICO rate in this study also persisted in developing and enacting strategies to compensate for their inadequate social assistance allowances. Mothers believed that it was their responsibility to work against existing structural constraints, and their responsibility to individually confront them to the best of their ability to ensure that their children would get preferred, healthier food choices on a more consistent basis. This type of individual motivation and responsibility, although highly commendable on the part of mothers, gets in the way of public policy incentives to change health negating environmental constraints. It perpetuates a strong bias towards understanding health problems as individual problems rather than societal ones, and encourages governmental strategies that are designed to change individual behaviour rather than health harming societal structures.

The substantive theory of *Persistent Optimizing* highlights and emphasises that much work is needed to improve mothers' ability to make healthier, preferred food choices for their children on a more consistent basis. Mothers should not have to work so hard to feed their children well. To help mothers promote the health of their children, change needs to take place at all levels of influence including; individual, interpersonal, community and the societal or policy level. Based on the findings of this study,

conclusions and implications for nursing practice and policy, nursing education and nursing research will be discussed in Chapter Eight.

CHAPTER EIGHT: CONCLUSION

Drawing from the findings of this study, in this final Chapter, I present conclusions and discuss implications for nursing practice and policy, nursing research, and nursing education. I conclude with some final thoughts.

Conclusion

Reducing children's risk of becoming overweight and obese is a significant component of tackling the complex public health problem of childhood obesity. Addressing this problem will require comprehensive and multi-factorial approaches that attend to both individual behaviours and socio-environmental factors and conditions (PHAC, 2011).

This constructivist grounded theory inquiry informed by the sensitising constructs of symbolic interaction and the socio-environmental health promotion perspective addressed a gap in the research in which researchers have tended to explore food choices using theories that highlight individual and interpersonal criteria as the main determinants of food choice. Although these theories offer valuable insights into the psychological characteristics of individual's food choice practices, they fall short in explicating the particular role of mothers and the intricacies of the mother-child feeding relationship in making food choices for their children and the significant role that complex, interacting social and environmental factors play in this process.

The substantive theory of *Persistent Optimizing* provides a novel theoretical rendering of the process that these 18 CBRM mothers from different economic, educational, cultural, and geographical backgrounds used to enhance their ability to make preferred, healthier food choices for their preschool age children on a more consistent

basis. The findings confirm that mothers face growing complexities in their food choice practices in responding to multiple contextual constraints, intensified by today's obesity-producing environment. *Persistent Optimizing* integrates mothers' powerful descriptions of how they worked day-by-day to push against *Acknowledged Contextual Constraints*, how they creatively and persistently invented and enacted moderating strategies in *Stretching Boundaries* to increase the food choices available to them and employed optimizing strategies in *Strategic Positioning* to better position them to make healthier choices. The findings of this study confirm, support, and extend previous findings that a variety of socio-environmental factors and conditions, consistent with an obesity-producing environment, influence and constrain the construction of mothers' ability to make food choices that promote their children's health and reduce their children's risk of becoming overweight and obese. These findings reinforce and provide additional evidence to support the direction of the Nova Scotia childhood obesity prevention strategy that recommends creating supportive environments to counteract obesity-producing environmental factors and conditions (Government of Nova Scotia, 2011).

As discussed in Chapters One and Two, social environmental factors, operating at both individual and population levels, influence the extent to which individuals possess the physical, social, and personal resources necessary to achieve personal goals, satisfy daily needs, and cope with the environment (Raphael, 2009). The findings of this study framed in the process of *Persistent Optimizing* advance our understanding of the actions and interactions between factors and conditions at all levels of the socio-ecological model and mothers' agency to make intended, healthier food choices that promote their children's health and reduce their risk of becoming overweight and obese.

In this study, mothers were challenged to make healthier food choices for their preschool age children from among the wide range of choices consistent with our present obesity-producing environment and the market economy. For mothers in this study the notion of choice was largely an illusion; choice was more a contested notion than a straight forward process. The preferred, healthier food choices mothers reported wanting to make were often out of reach due to constraining factors such as cost, time scarcity, cooking ability, and food marketing practices that supply the overabundance of high calorie, low nutrient foods in the market and encourage children's food preferences for these less healthy, obesity-producing options. In addition, mothers were not always certain which food choices were the healthier ones. Maziak and Ward (2009) suggest that the ability of individuals to make rational choices in a market economy is too simplistic to work; choices become blurred when individuals are bombarded with hundreds of food and drink options each with its own set of rational arguments for the benefits of each product. In addition, Goldberg and Sliwa (2011) note that consumers are inundated with nutritional advice from multiple sources, which operate from different perspectives, different biases, and different agendas. These generally include all levels of government, non-profit organizations, the media, food and beverage industries, and consumers themselves.

Indeed, the process of *Persistent Optimizing* brings into focus the embeddedness of mothers' feeding work in the flow of everyday life. Furthermore, it highlights the persistent and generally invisible industriousness and agency of mothers to respond and react to multiple contextual constraints that hindered their ability to make healthy food choices for their preschool age children. Mothers in this study varied in their ability to

use both practical and discursive consciousness to enhance their individual agency to reflect on and monitor their food choice practices. Mothers developed and enacted a repertoire of strategies across a continuum to lessen the constraints that limited their choices. Mothers living below the LICO rate were particularly challenged to develop additional strategies to compensate for their low incomes. All mothers' accounts clearly identify their growing level of critical knowledge and their developing sense of empowerment. Persistently working against contextual factors that constrained their choice, mothers attempted to make their best food choices in any given situation, acknowledging that on many occasions it was not their preferred choice. Mothers' constrained food choices shatter the illusion of free choice.

Study Limitations

Although consistent with the methodological requirements for a constructivist grounded theory study, the findings of this study were drawn from a relatively small sample of mothers residing in one particular geographical area. Efforts were made to include women of different racial and ethnic origins who reflect the population diversity in CBRM, yet only two Mi'kmaq women participated. To capture the views of women who did not live in Cape Breton all their lives, women who had moved to the CBRM from other areas and women who had lived outside of the CBRM for long periods of time were included. Overall, the majority of women who were interviewed referred to themselves as Cape Bretoners. Therefore, it is possible that the process reported and the theory generated is a reflection of this particular, deep rooted culture and may not represent all mothers' experiences of making food choices for their children. In addition, the findings of this study relied mainly on one type of data collection, in depth

interviews. However, I interviewed 17 of the 18 mothers twice, which extended my dialogue with them and enhanced their contribution to my theory development. I recorded field notes prior to and following all interviews, which became part of the data. In addition, over the 16 month period of data collection I regularly observed grocery store and restaurant practices that mothers brought to my attention in interviews. I recorded my observations and included these observations in my interviews with mothers and in my data analysis. In the absence of direct observation of participants in feeding their children, and given the fact that I am a white, middle class, academic with a nursing background, it is possible that the participants behaved differently in making food choices for their children than what they reported in the interviews. However, over the initial and follow up interviews, mothers' stories remained consistent.

Implications

Helping mothers to make food choices that promote their children's health and minimize the risk of their children becoming overweight or obese will require collective action from multiple levels of influence including policy level changes that address the socio-environmental determinants of health to supporting individuals, families, and groups to make healthier food choices on a more consistent basis. Creating conditions that enhance mothers' ability to make healthier food choices for their children would play a key role in improving children's health trajectories and diminishing their risk of developing obesity related chronic illnesses. The following section outlines key implications for nursing practice and policy, nursing research, and nursing education.

Implications for Nursing Practice and Policy

Mothers' tireless efforts to feed their children preferred, healthier food choices

must be accompanied by public policy that will make the healthy choice the easy choice. According to Maziak and Ward (2009), it is time for health promotion to come to terms with the reality that as free individuals in a global market economy, one's behavioural choices are not so influenced by what is good for us but by the myriad choices to which we are exposed and our preference for certain choices over others. Generally, most people do not have perfect information, resourcefulness, or motivation to make healthy choices, but will welcome assistance to act in their own best interest (Kooreman & Prast, 2010). For mothers in this study their capacity to make preferred, healthier food choices for their children was directly influenced by many socio-environmental factors and conditions, consistent with an obesity-producing environment, which constrained their choice. Enabling mothers to be able to make food choices that promote their children's health on a more consistent basis will require social and policy changes that make the healthiest choices the easiest to make. Recognizing that health is determined by a variety of complex and interacting factors, maintaining and creating health will also require sustained action by many partners whose mandates support similar goals (Vollman, 2008). In this way, the focus to improve health is redirected from being solely the responsibility of the individual towards multi-sectorial responses that adopt a more upstream, population health focus and encompass a variety of health promotion strategies including: building healthy public policy, creating supportive environments, strengthening community action, reorienting health services and developing personal skills (WHO, 1986). These strategies will require the collaborative and concerted efforts of many stakeholders including government and non-governmental agencies, private sectors, community members, and a variety of health professionals.

Community health nurses are expected to work independently and collaboratively with various professionals, organizations, and communities to promote individual and community health (CHNC, 2011). As part of a multidisciplinary professional team they have a significant role to play in enabling mothers to make healthy food choices for their children. A predominant emphasis for community health nurses is the promotion, protection, and preservation of the health of individuals, families, groups, and populations in settings where they live, work, learn, worship, and play (CHNC, 2011). To this end, an important role of community health nursing is to advocate for and engage in political action to encourage policies that facilitate healthy living (CHNC, 2011; CPHA, 2010).

To enable mothers to make healthier food choices, community health nurses, other health professionals, community members, and related professional organizations and partners must support and advance policies that attempt to curtail health negating food marketing practices. Presently, Canadian retail supermarket operations control most of the power over which foods are available for purchase. The foods most heavily promoted, marketed, and prominently placed are those that yield the greatest margin of profit for these operations. Unfortunately for the consumer, these products include foods that are highly processed and "pseudo foods" or foods that are typically high in sugar and/or fat, and calories and low in nutrients, consistent with an obesogenic or obesity-producing food market (Lobstien, 2008; Winson, 2004). According to Lobstien (2008), substantial resources have been invested in the production of food that does not promote health. Lobstien asserts that this has helped to create an obesogenic economy or a market economy that encourages weight gain, in which children are a prime target. These

powerful food supply chain forces spend huge sums of money on food marketing in an attempt to mould the food consumer, whereas governments deliver large amounts of rhetoric but very little money on urging consumers to change their eating practices (Lang & Heasman, 2004). Mothers in this study confirmed that food advertising to children, child designed food packaging, and product placement in grocery stores, all influenced their children to request foods that were generally less healthy. These factors made mothers' work of providing more healthful food choices more difficult. Mothers had to work against this market system designed to discourage rather than encourage children's health.

Corporate self-regulation is the current system used in Canada to control food advertising to children. According to the advocacy group, Centre for Science in the Public Interest (2007), minimal evidence exists to prove that self-regulation, which generally consists of limited enforcements and softer penalties, is effective. Self-regulation is not in the best interests of mothers as the responsibility is put back on them to monitor their children's exposure to various forms of media.

The following are policy options suggested by public health experts to counteract the effects of food marketing practices (Dietitians of Canada, 2010): First, restrict or better regulate the content of food ads directed to children. Quebec is presently the only province in Canada that has a ban on all television advertising during children's television programming. Second, strengthen and expand public health campaigns that promote healthy eating and active living. These campaigns must be carefully crafted so that they do not perpetuate the notion that it is the individual's responsibility to make the right choice without consideration of the role that structural barriers play. Campaigns

used in an educational manner may help to counteract some of the negative influences of unhealthy marketing and pressure the government into taking further action. Third, embed messages regarding healthy eating directly into television programming. Finally, design interventions that reduce screen time for children. Community health nurses as part of a collaborative, multidisciplinary team can play a role in encouraging and supporting these types of policies. They can also educate mothers regarding the effect that food advertising has on children and work with mothers to develop strategies to reduce this influence. In the absence of government action to regulate private industry by banning marketing to children, community health nurses along with other health professionals, community health boards, and informed community groups can be instrumental in advocating for and encouraging others to advocate for improvements to the current self-regulating system in Canada and banning marketing to children. According to Dutton, Campbell, Elliott and McLaren (2012), the present and predicted future nutrition-related chronic diseases in Canadian children will require population level interventions such as a ban on the marketing of foods and beverages to children, in the face of government reluctance to do this; there is an important role for the health community in taking on this task. Community health nurses can take a lead role in organizing and facilitating community groups to address this important issue.

In exploring the various constraints that mothers in this study identified, it is significant to note that one group of mothers, namely those living below the LICO rate struggled with the same challenges as other mothers to feed their children, but their efforts to provide healthy food choices was compounded by their lack of income. Mothers struggling to feed their children in food insecure homes, on a reduced budget,

require additional attention. Promoting social justice is a fundamental component of community health nursing practice (CHNC, 2011; CPHA, 2011). Based on the concepts of human rights and equity, a social justice leaning, means that all people and groups, regardless of circumstances should have equal access to a basic quality of life including health protection, basic income levels, and opportunities to be healthy (CPHA, 2011).

A view of Canada as a liberal welfare state in which the predominant ideological inspiration is individual liberty is often at odds with a social justice standing. To maintain liberty in a liberal welfare state, government interventions such as social programs and supports are minimized (Raphael et al., 2007). Some 15 years ago, Travers (1996) carried out an institutional ethnography to explore the social organization of nutritional inequities among socio-economically disadvantaged families within Nova Scotia. She concluded at that time that policies dominated by a market liberal discourse were contributing to the perpetuation of nutrition and health inequities. Travers argued that in order to reduce inequities to support health, political change was essential. Unfortunately, to this day, the necessary political change has not occurred.

Within the neoliberal ideology of the liberal welfare state, liberty and its close neighbour, self-determination are only attainable to a select group of the population, namely those who have the sufficient financial resources and cultural capital to define their own living conditions (Coburn, 2010). Mothers in this study living below the LICO rate were not among this fortunate group of the population. These mothers were seriously constrained by their lack of money. Mothers either used food banks as a regular part of procuring foods, or as a last resource. They used their time and energy relentlessly to enact strategies to stretch their meagre income in order to feed their children. Consistent

with food insecure households, they were compelled on a more frequent basis to make food choices for their children that were cheaper but also less nutritious and more calorie dense. These cheaper types of food products tend to be higher in fat, sugar, salt and calories and lower in nutrients. Retail food and industry practices and trends have inundated supermarkets and grocery stores with these products as they yield high profits (Winson, 2004). According to Winson (2004), it is highly plausible that the aggressive promotion of these types of products have contributed to the increase of adverse health outcomes related to the epidemic of obesity that characterizes Canada today.

Social policies in Canada are not meeting the needs of mothers living below the LICO rate to adequately feed their children (McIntyre & Rondeau, 2009; Tarasuk, 2009). To address this serious issue, McIntyre and Rondeau (2009) suggest a number of policy recommendations. They recommend raising real incomes, whether from minimum wage or social assistance. According to Statistics Canada (2009), Nova Scotia has the highest reported rate of female-headed lone parent families within Canada and is among one of the provinces reporting the highest rates of poverty among lone-parent families. Mothers' limited income must cover, among other things, the cost of housing, utilities, and possibly child care expenses. These expenses often contribute to having less money to buy food. McIntyre and Rondeau (2009) state that healthy foods such as milk must be made more affordable and suggest it might be time for Canada to consider a food-staples policy that supports greater opportunities for healthy eating among its most vulnerable members of society. In addition, to ensure families have enough money to consume a healthy diet on a more consistent basis, policies and programs should be put in place to provide affordable housing and quality child day care. Finally, a food security policy lens

should be applied to all social policies to make certain that they reduce "genuine" hunger rather than exacerbate it (McIntyre & Rondeau, 2009). Community health nurses can add their voices in advocating for and promoting these policies.

Community health nurses, guided by a concern for social justice and equity are called to play a role in advocating for and promoting policies that address health inequalities (CPHA, 2010). Halfon, Larson and Russ (2010) suggest that a national childhood policy agenda to support families through direct and indirect approaches such as the provision of adequate family income, or labour market policies that support time for parenting, and early intervention and prevention services are needed. Community health nurses must work with mothers, families, other health professionals and organizations to advocate for and support policies that promote child health and address the upstream determinants of health inequalities.

In addition to advocating for policies to create supportive environments that would enable mothers to make healthier food choices on a more consistent basis, mothers of all incomes would benefit also from individual or group interventions to address their needs. Mothers in this study had varying levels of knowledge regarding what foods were consistent with a healthy preschool age diet: mothers had different food preparation skills, unique time management issues, and varied ability to afford healthier food choices. To address these needs, community health nurses must work singularly and/or collaboratively with other professionals and organizations to creatively provide mothers with the information and supports they need to understand the basic elements of a healthful diet and the necessary skills required to purchase and prepare it. This can aid in enhancing mothers' level of literacy and increasing their personal autonomy to make

positive health choices among available foods. Collaborating with other sectors to assist individuals, families and other population groups to take responsibility for maintaining and promoting their health is an important component of community health nursing practice (CHNC, 2011). This may be achieved by increasing people's knowledge, influence, and control over the determinants of health (CHNC, 2011).

In this study, some mothers who lived below the LICO rate took advantage of a program offered by their local Family Resource Centre that provided information and hands-on skill development related to purchasing and preparing basic, affordable meals. These mothers acknowledged that they developed knowledge and skills, which helped them to purchase and prepare healthier foods for their children. Family Resource Centres throughout Canada are federally funded through Community Action Programs for Children (CAPC). They provide programs that address the health and social development of children from birth to age six. These programs are designed to address health inequities by prioritizing services and programs to children of adolescent mothers, families with low incomes, and those who are socially or geographically isolated (PHAC, 2008).

Community health nurses can help to build individual and community capacity to provide healthier food choices on a more consistent basis by collaborating with other knowledgeable health professionals and working with women to develop programs adapted to their particular needs. Even well educated, professionally employed mothers in this study admitted that they would benefit from more information on feeding preschoolers as well as from cooking classes. Some mothers may also benefit from a

variety of parenting classes to help them develop food parenting practices to encourage their children to try healthier foods and to help family members support these practices.

Community health nurses, in collaboration with other health professionals, will have to work closely with mothers, recognizing that all mothers are different and their desire for particular information as well as their capacity to understand and use relevant information will vary. In many situations, mothers have a great deal of knowledge and skills that they can share. For instance mothers living below the LICO rate have impressive knowledge related to economizing. Programs that permit mothers to share what they know and what they are good at with other mothers would help to build on mothers' strengths while increasing their capacity and empowering mothers to take action to improve their ability to make food choices that promote health and reduce their children's risk of becoming overweight or obese. According to Halfon et al. (2010), it is imperative that parents and professionals work together from the ground up to implement cross-sector, place-based initiatives designed to promote positive health in childhood.

Collaborating with other health professionals and organizations and providing mothers with an opportunity to share their successes with other mothers are consistent with the priorities of community health nurses, which include consolidating and expanding partnerships for health, increasing community capacity, and empowering the individual (CHNC, 2011; WHO, 1997). In addition, it is consistent with the Nova Scotia Public Health Standards that are grounded in health equity and social justice, and work towards improving the health of the overall population and reducing health inequities among groups (Nova Scotia Public Health Standards [NSPHS], 2011). Healthy development is one of the four Nova Scotia Public Health Standards. Particular to helping

mothers provide healthy food choices for their children in an obesity-producing environment, this standard emphasises that public health must work towards shifting efforts more upstream to enable, mediate and advocate for social, economic, and physical environments that support healthy development of Nova Scotia's children, youth and families on a population basis (NSPHS, 2011). In addition, the Nova Scotia childhood obesity prevention strategy recommends developing healthy public policy to help increase healthy eating and physical activity by creating supportive environments in the places where children and families live, learn, work, and play (Government of Nova Scotia, 2011).

In summary, to aid in an empowerment process that enhances mothers' agency to make food choices that promote their children's health, community health nurses must direct their practice to work further upstream and integrate a population health promotion focus to reduce inequality and health inequity related to socio-environmental factors and conditions, and advocate for a policy environment that facilitates the positive expression of human agency (Heron, 2008).

Implications for Nursing Research

The constructivist grounded theory methodology that was used in this study was an appropriate approach to study the health promotion phenomenon of how mothers made food choices for their preschool age children. This methodology combined the emancipatory goals of a socio-environmental health promotion perspective and of nursing inquiry, and aided me in providing the type of critical inquiry necessary to examine and address both the visible and invisible aspects of the broader social, political, economic and environmental factors that contribute to health (Kushner & Morrow, 2003).

Integrating the conditional/consequential matrix (Strauss & Corbin, 1990, 1998) into my data analysis helped me to expose the contextual structures at all levels and across levels of the socio-ecological model that shaped and conditioned mothers' food choice practices for their preschool age children.

Health researchers and the many Canadian workers whose occupations are concerned with the health of the public can play an important role in encouraging public, professional, and policy makers to shift their focus beyond individualistic, biomedical and behavioural research paradigms towards constructivist and critical paradigms that recognize a social determinant health perspective. According to Raphael et al. (2007), this shift will require conducting qualitative research that furthers understanding about the impact that social determinants of health have on people's lives.

A role of community health nurses is to participate in research into key issues relevant to community health and wellness using research methodologies that involve community members in planning and carrying out research (CPHA, 2010). Consistent with this study design, Edwards (2011) suggests that community health nursing research is needed to better delineate structural influences on inequalities, recognizing that structural influences are generally so embedded into our system and in the way things are done that we do not see them and therefore miss the opportunity to act on them to reduce health inequities.

Recognizing that social life is constructed and contextualized obligates the researcher to understand this constructed reality. In this study constructivist grounded theory methodology enabled me as a researcher to hear and report mothers' narratives about the complexities and the frustrations they experienced in trying to feed their

children well in an environment that made the healthiest food choices the most difficult to make. This methodology aided me in explicating the interplay between mothers' agency and constraining interpersonal and social structures in the social practice of feeding children. The findings of this study exposed how hard and how relentlessly mothers strategized and worked to push back against these multiple contextual factors. Mothers enacted strategies to deal with their children's preferences towards less healthy food choices that were exacerbated by family members' conflicting feeding views and health negating food marketing practices. They developed strategies to deal with the protracted time and skill required to prepare healthy meals. Mothers with income levels below the LICO rate developed a variety of strategies in an attempt to combat the high costs of healthy food. This type of community-based, population health evidence is critical in that it allowed the voices of those who were most influenced by existing interpersonal and socio-environmental barriers to be heard, highlighting how policy level changes are needed to help mothers make better food choices on a more consistent basis, thereby promoting their children's health and reducing the risk of childhood obesity.

Byrant (2002) suggests that there is some indication that policy makers and the media may be responsive to this type of population-based evidence. Notably, this type of research constitutes a relatively small proportion of public health and health services research (Raphael et al., 2007). Nurse researchers can play a role in collecting this type of evidence. According to Minkler (2005), there is an increasing recognition of the importance of community based, population-level research. The IOM (2005) recommends that this type of research is needed to explore the most important established factors that drive changes in population health, how they are embedded in the

socioeconomic and built environment and how they affect society at large with regard to improving nutritional health and reducing the prevalence of childhood obesity. Along with individual and interpersonal level barriers, this study identified many population level constraints that mothers experience when trying to make preferred, healthier food choices for their preschool age children. The intent of this study was to develop a substantive theory of the process that mothers use to make food choices for their preschool age children, therefore specific barriers were not explored in great detail. Further, more detailed research into any of these barriers and the mediating variables that account for the complexity of food choice is warranted. In addition, future research is needed to confirm and expand on the theoretical explanation of *Persistent Optimizing* with larger and more diverse samples in different geographical areas.

Implications for Nursing Education

"Future thinking" is a requisite for nursing educators. Thorne (2006) suggests that our main function is to prepare the next generation of nurses to function optimally in a "world order that we can only begin to comprehend" (p 165). Recognizing that historically nurses have provided care at the level of the individual, Thorne articulates that in order to prepare nurses for their future roles we must equip them to look beyond the individual perspective, thereby increasing their potential to make a disciplinary contribution to the social policy issues that so intimately impact on an individual's and a population's capacity for health and wellbeing.

Recent discourses on the social determinants of health (Raphael, 2009) support this recommendation. Raphael concurs that there is a need to shift the discussion of health away from individualistic, biomedical, and behavioural risk factors towards

emphasizing living conditions as the primary determinants of individual and population health. Role expectations of community health nurses include, among others, identifying the root causes of illness, disease, and inequities in health, building individual and community capacity, facilitating access and equity for all members of society, advocacy, and socio-political action, and inter-professional collaboration (CHNC, 2011). Concerns have been raised that present undergraduate nursing education programs fall short at preparing graduating nursing students to fulfill these roles (Cohen & Gregory, 2009; Schofield et al., 2010).

Promoting health is a shared responsibility of many interrelated professions, therefore inter-professional collaboration is an important competency for graduating nurses. To encourage inter-professional collaboration nursing programs should include curricula that encourage, support, evaluate, and facilitate inter-professional education and practical experiences with team members from other health care professions (MacDonald et al., 2010). This may include placing students in non-traditional community health nursing clinical areas (Schofield et al., 2011). These opportunities can enhance student's collaborative skills and understandings of various professional roles. Addressing complex issues such as childhood overweight and obesity will require the concerted efforts and collaboration of many health care professionals with a common goal.

Community health nursing theory and practice generally make up a smaller portion of student's educational hours, the majority of nursing education hours focus on traditional, individual, client-centered care. Therefore, to prepare nursing students to identify the root causes of illness, to be advocates, to promote the principles of social justice and health equity, and to engage in socio-political activity to promote the health of

individuals and populations will require ensuring that the overall nursing curricula include opportunities for inter-professional collaborations and that they emphasize population focused perspectives rather than primarily individualistic perspectives. Rush (1997) contends that exposing students to the individual, behavioural components of health promotion without simultaneous sensitization to the larger structural realities fosters an individualistic health promotion ideology; nurse educators must be attentive to and help students recognize the presence of ideology in both the theory and practice of health promotion. A population focus helps students realize the significant role that social and environmental determinants play in shaping health at the individual, community, and population levels. Moreover, it offers insights into their role as future health professionals in creating environments that are more supportive of health.

The socio-environmental health promotion discourse that informed this study recognizes that individual behaviour change and structural change are necessary to promote health; neither one is sufficient on its own. Constraining structural factors and conditions played a predominant role in constructing how mothers made food choices for their children. The substantive theory of *Persistent Optimizing* highlights mothers attempts to limit the impact of social structures to enhance their agency to make preferred, healthier food choices for their children thus promoting their preschool age children's health and reducing their risk of becoming overweight or obese. Mothers worked tirelessly to do their best for their children in an environment that made making the healthy food choice the most challenging option. Providing a nursing curriculum that promotes viewing serious public health issues such as childhood obesity from a socio-environmental health promotion perspective would invite students to redirect the focus

for improving health away from individual responsibility to control or change one's behaviour and direct it towards a more upstream, population health promotion approach that includes implementing policies and programs to provide supportive structural conditions and opportunities for populations to change their practices (Frohlich & Poland, 2007).

To promote health at a population level, to foster nursing advocacy, and socio-political action, baccalaureate level nursing education must include substantive content relating to advocating for healthy public policy (Reutter & Williamson, 2000). Advocating for healthy public policy is congruent with the socio-environmental health promotion perspective that requires an understanding of the broad determinants of health and their interrelationships. It is a recognized standard and competency of practicing community health nurses in Canada (CHNC, 2011). According to Reutter and Williamson (2000), helping students to focus on the determinants of health throughout their program can encourage them to think more critically regarding individual responsibility for health and to examine more critically the effect of a broad range of determinants and related policies on health issues. In relation to childhood overweight and obesity, students need current information relating to appropriate nutritional guidelines for children and an understanding and appreciation of the role of the obesity-producing environment. Students need assistance to increase their awareness of how multiple determinants of health intersect and influence a particular health issue. For instance, in this study, mothers' food choices for their children were influenced by gender, food security, income and social status, literacy and education, personal health

practices and coping skills, culture, early child development, and supportive environments.

Educational approaches are needed to help students develop the necessary knowledge and skills required to promote healthy public policy. Recommended course content should be geared towards enhancing students' knowledge and understanding of the policy making environment, theories and models of policy making, the policy level process, the legislation process, the roles and responsibilities of nurses with regard to influencing policies, and examples of policy advocacy engaged by nurses (Reutter & Williamson, 2000). In relation to this study, this knowledge and skill set will assist in empowering nurses to recognize and advocate for the policy level changes that are needed to reduce health inequities and to provide the environmental conditions that enable mothers to make healthier food choices for their children and in general to enable individuals and populations to live healthy and fulfilling lives.

Final Reflection

I concur with Buchanan (2006) who supports that promoting and increasing human autonomy can occur only if we provide the opportunities for people to think critically about the place of "good" health habits in relation to the kind of person they want to be, and the kind of society they want to live in. Concurrently, I believe it is important to encourage dialogue to help people reflect critically about and express ideas about how they want to live their lives, how their behaviours impact on their life goals, and the kind of environmental conditions that would help them to live healthy and fulfilling lives (Buchanan, 2006; Habermas, 1984). The constructivist grounded theory methodology informed by symbolic interaction and the socio-environmental health promotion research

perspective that I used in this inquiry guided and supported me in providing mothers with this opportunity. Its intent was emancipatory, whatever the outcome. The potential for empowerment was present as mothers freely shared their stories, considering and explaining how multiple contextual structures and relationships influenced their food choices and how they invented and enacted a variety of multiple and layered strategies to enhance their capacity to make food choices that protected and promoted their preschool age children's health.

In my interviews with these mothers I was humbled and moved by how hard they worked to feed their children well. Particularly for women living below the LICO rate, there was no time to rest. Feeding their children was a constant preoccupation. Missing out on sales or coupons meant having to provide food choices that were less healthy and that increased their children's risk of becoming overweight or obese. The knowledge that these mothers possessed in relation to stretching their meagre incomes to provide food for their children was impressive. It was also disturbing. Canadian mothers should not have to work so tirelessly to provide their children with food choices that promote health and that reduce their children's risk of becoming overweight and obese. By taking on the work of feeding their children as an individual accomplishment, mothers perpetuate the idea that the market economy is working well and conceal the need for public policy interventions to change health negating constraints. Further studies similar to this one are needed to sound the alarm continually that contextual constraints must be altered to create the socio-environmental conditions necessary to ensure that all mothers are able to make preferred, healthier food choices for their children in every situation. In this way

the burden that mothers face will be lessened and the opportunities for children to grow into healthy adults will be enhanced.

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APPENDIX A

LETTER OF INTRODUCTION TO DIRECTORS

Exploring the Process That Influences Mothers' Food Choices for Their Preschool Age Children within the Cape Breton Regional Municipality

Principal Investigator:
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Supervisor:
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Toll Free: 1-800-500-0912
donna.meagher-stewart@dal.ca

Letter of Introduction

Dear _____

I am a graduate student in the PhD Nursing program at Dalhousie University. As part of the requirements for this program I am conducting a research study. The focus of my research is promoting children's health in relation to childhood nutrition. This is an important topic today in light of the increasing number of children becoming overweight and obese. The purpose of my study is to learn more about how mothers living in Cape Breton Regional Municipality (CBRM) make food choices for their preschool age children. In this study mothers will be invited to identify and describe how they decide on the food choices they provide for their preschool age children as well as how they describe any social, family, community, or other environmental factors that influence the choices they make.

The sample proposed for this study will include approximately 20 mothers residing within the CBRM who have children between the ages of 2-5 years of age who do not have any dietary restrictions. The study will involve interviewing each mother on two separate occasions.

As an agency that provides services to this age group I am contacting you to explore the possibility of meeting and potentially recruiting participants through your offices or centres. I would be interested in enlisting the help of your staff that work closely with mothers of preschool age children. The role of interested staff members would be to tell mothers about this study. I will provide recruiters with a Letter of Introduction and Consent form to review with potential participants for their consideration. If a mother indicates an interest to participate in the study, the recruiter will provide the mother with my name and contact information so that she may contact me. I would then provide interested mothers with additional details and obtain written consent.

Participating in this study in this capacity will contribute to research that has the potential to provide valuable information for individuals, healthcare providers, and other stake holders to create the individual, social, environmental, and political conditions required to improve mothers' ability to make food choices that protect and promote their children's health.

I would like to meet with you in person or by phone to discuss your interest in participating in this study in the above noted capacity. I will be happy to answer any questions or to provide additional information regarding the study. Please contact me at (902) 563-1959 or email audrey_walsh@cbu.ca

Sincerely,

Audrey M. Walsh

APPENDIX B

LETTER OF INTRODUCTION TO AGENCY STAFF

Exploring the Process That Influences Mothers' Food Choices for Their Preschool Age Children within the Cape Breton Regional Municipality

Principal Investigator:
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Letter of Introduction

Dear _____

I am a graduate student in the PhD Nursing program at Dalhousie University. As part of the requirements for this program I am conducting a research study. The focus of my research is promoting children's health in relation to childhood nutrition. This is an important topic today in light of the increasing number of children becoming overweight and obese. The purpose of my study is to learn more about how mothers living in Cape Breton Regional Municipality (CBRM) make food choices for their preschool age children. In this study mothers will be invited to identify and describe how they decide on the food choices they provide for their preschool age children as well as how they describe any social, family, community, or other environmental factors that influence the choices they make.

The sample proposed for this study will include approximately 20 mothers residing within the CBRM who have children between the ages of 2-5 years of age who do not have any dietary restrictions. The study will involve interviewing each mother on two separate occasions.

As a staff member that provides services to mothers and their children within this age group I am contacting you to explore the possibility of enlisting your help to inform mothers about this study. I will provide you with a Letter of Introduction and Consent form to review with potential participants for their consideration. If a mother indicates an interest to participate in the study, you will give the mother my name and contact information so that she may contact me. I would then provide interested mothers with additional details and obtain written consent.

Participating in this study in this capacity will contribute to research that has the potential to provide valuable information for individuals, healthcare providers, and other stake holders to create the individual, social, environmental, and political conditions required to improve mothers' ability to make food choices that protect and promote their children's health.

If you are interested in participating in this study in the above noted capacity I would like to meet with you in person to present an overview of the study. At this time I would provide greater detail regarding your role in recruiting participants, answer your questions, and address any concerns you might have. Please contact me at (902) 563-1959 or email audrey_walsh@cbu.ca

Sincerely,

Audrey M. Walsh

APPENDIX C

LETTER OF INTRODUCTION AND CONSENT FORM

Exploring the Process That Influences Mothers' Food Choices for Their Preschool Age Children within the Cape Breton Regional Municipality

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Introduction

We invite you to take part in a research study being conducted by Audrey Walsh who is a graduate student at Dalhousie University as part of her PhD nursing program.
Your participation in this study is voluntary and you may withdraw from the study at any time. The study is described below. This description tells you about the risks, inconvenience, or discomfort which you might experience. Participating in the study might not benefit you, but we might learn things that will benefit others. You should discuss any questions you have about this study with Audrey Walsh.

Purpose of the Study

The purpose of this study is to learn more about how mothers living in Cape Breton Regional Municipality (CBRM) make food choices for their preschool age children. Mothers will be invited to talk about how they make food choices for their preschool age children as well as how they describe any social, family, community, or other factors that influence the food choices they make.

Study Design

The experiences that mothers describe will be studied to develop a theory that describes the processes that mothers use to make food choices for preschool age children.

Who can Participate in the Study

You may participate in this study if you are a mother living within Cape Breton Regional Municipality who has a child between the ages of two - five years of age who does not have any dietary restrictions. Mothers of children who have specific dietary restrictions may be required to make specific food choices related to her child's condition therefore, these mothers will not be included in this study.

Who will be Conducting the Research

This study will be conducted by me, graduate nursing student, Audrey Walsh as part of my doctoral nursing program at Dalhousie University. I will be supervised by my thesis committee supervisor, Donna Meagher-Stewart PhD, and thesis supervisory committee members, Marilyn Macdonald PhD, and Doris Gillis PhD(c). I may hire an individual to help with typing the interviews from the audio tape.

What you will be asked to do

You will be asked to meet with myself at an agreed upon time and location to take part in a face- to- face taped interview which will last about 90 minutes. During this interview you will be invited to describe how you decide on the food choices you make for your preschool age children as well as to describe any individual, family, community, or other factors that influence the food choices you make.

Following the initial face- to- face interview I will type out the interview that was recorded. You will be asked if you would like to receive a copy of this type written interview to read over. If you agree to this a copy will be mailed to you. If you chose not to receive the type written interview then I will contact you to give you an oral overview of what was discussed in the interview.

Two–three weeks after you receive the typed interview or oral overview I will invite you to take part in a second taped interview which will last about 30-45 minutes. You may choose to do this interview face-to-face or by telephone. During this second interview you will be invited to comment on the accuracy of your type written or oral overview of your first interview as well as to discuss and confirm the early findings of the research study.

You will be asked to complete some general information such as your age, cultural background, number of children and their ages, partner status, educational level, and employment status.

Possible Risks and Discomforts

The risks and discomforts associated with taking part in this study appear to be minimal. However it is possible that talking about making make food choices for your preschool age children may bring up feelings of discomfort or frustration. These types of feeling may result from thinking about and talking about any past unpleasant or negative experiences you may have had while providing food for your children. Please remember you do not have to answer any questions that make you uncomfortable or that you do not want to answer and that you are free to end the interview at any time. I can turn off the tape recorder and you may take a break if needed. You may speak with me during the interview, following the interview, or call me at a later date to discuss the interview if you choose.

Possible Benefits

Direct personal benefits cannot be guaranteed from taking part in this study. You may benefit indirectly by being able to talk about your thoughts and experiences of making food choices for your children. You may increase your awareness or understanding of the factors that help or prevent you and other mothers from making particular food choices. Your participation may also contribute to research that has the potential to help mothers make better food choices for their preschool age children.

Compensation/Reimbursement

In appreciation for taking part in this study you will receive $25.00. I will attempt to minimize any cost to you by scheduling interviews at your convenience and desired location. A cheque for this amount will be mailed or presented to you after end of the interview.

Confidentiality & Anonymity

Your name or any personal information you provide during the study will not be shared with anyone else. Your name or anything about you that could identify you will not appear in any report or publication of the research. All papers, cassette tapes, or computer files or other identifying facts about you will be stored in a locked filing cabinet. All data stored on computer will be password protected. Only I will have access to this information. Audiotapes will be identified with a code name; your real name will not be recorded. All data pertaining to this study will be securely maintained in a locked location for 5 years after the study is completed and published. After this time the information will be destroyed. When the study is complete, the results will be shared with interested groups and may be published in a professional journal. Quotes from the interviews will be used in publications or presentations; however participant's names will not be associated with any quotes.

Further Information About the Study

You will be given a copy of your signed consent form for your own records at the beginning of the study.
Following completion of the study you will be mailed a summary of the research findings.

Questions

If you have any questions related to this study please contact Audrey Walsh at (902) 563-1959, or Donna Meagher-Stewart at Dalhousie University School of Nursing toll-free number 1-800-500-0912. Should any new information arise which might affect your decision to participate in this study I will share this with you.

Problems or Concerns

If you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact Patricia Lindley, Director of Dalhousie University's Office of Human Research Ethics Administration, for assistance at (902) 494-1462. Please feel free to call collect. Patricia may also be reached by email patricia.lindley@dal.ca

EXPLORING THE PROCESS THAT INFLUENCES MOTHERS' FOOD CHOICES FOR THEIR PRESCHOOL AGE CHILDREN IN THE CAPE BRETON REGIONAL MUNICIPALITY

VOLUNTARY CONSENT FORM

I, _____, have read, or have been read the explanation about this study. I have been given the opportunity to discuss it and all my questions have been answered to my satisfaction. I have had sufficient time to consider whether to participate in this study. I hereby consent to take part in this study. I understand that my participation in this study is entirely voluntary and that I may withdraw from the study at any time without penalty.

Participant Signature _____

Date_____

Investigator Signature _____

Date _____

I, _____, consent to have my interview audio recorded.

Participant Signature _____

Date_____

Investigator Signature _____

Date _____

I, _____, give permission for words and/or statements spoken by me during the interviews to be quoted in presentations and used in published material. I am aware that these quotes will not be traceable to me. They will be presented and published with no identifying information.

Participant Signature _____

Date_____

Investigator Signature _____

Date _____

APPENDIX D

DEMOGRAPHIC PROFILE

Exploring the Process That Influences Mothers' Food Choices for Their Preschool Age Children within the Cape Breton Regional Municipality

Date: _____ Code name: _____

As part of my study I would like to know some general information about the people that I am interviewing. Before we begin the interview I would like to ask you some questions to learn more about you.

1. Age _____

2. Cultural Background _____

3. Partner status _____

4. Education Level_____

5. Employment Status _____

6. Number of Children living at Home _____

Age of Child _____

Age of Child _____

Age of Child _____

Age of Child _____

Age of Child _____

APPENDIX E

SAMPLE QUESTIONS FOR SEMI-STRUCTURED INTERVIEW

Exploring the Process That Influences Mothers' Food Choices for Their Preschool Age Children within the Cape Breton Regional Municipality

1. Let's start by talking about foods your children (child) like. What are their favourites….top three?

   Probes:

   - Do they enjoy eating a variety of foods?

2. Who is primarily responsible for choosing what they eat?

   Probes:

   - Does anyone else in the home or outside the home help with making these choices?

3. Tell me about how you choose what foods to give your children.

   Probes:

   - What role does your child play in choosing the foods they eat?
   - Do you eat the same foods as your children?
   - Do you sit at the table and eat with your children?
   - Do the children ever watch television while eating?
   - Do you feel food advertising influences the food you choose for your children?
   - Does your child eat all meals at home during most days? If not where?

4. Where does most of your food come from? (Grocery store, food bank, garden, family…)

5. Who is responsible for getting groceries for the family?

6. Tell me about grocery shopping for you

   Probes:

   - Where do you purchase groceries for your family?
   - How would you describe a typical grocery shopping trip?
   - How do you get to the grocery store?
   - How do you decide what foods to put in your cart?
   - Do you look at food labels?
   - What do you look for on it?
   - Do you find food labels helpful/confusing…?
   - What is it like for you to make these food choices?

7. Tell me about meal preparation

   Probes:

   - Who prepares the meals in your home?
   - What kinds of things help you decide what to prepare for your children?
   - If you needed information about feeding your children, where would you turn?

     Who do you ask for information -- family, friends, professionals, organizations…?
   - Where do you look for information-- books, websites …?

8. Are you concerned about your children's weight?

   Probes:

   Do you think weight is a problem for preschool age children?

9. How do you feel about the food choices that you are able to make for your children?

10. Are there food choices for your children you would like to be able to make that you are not able to make right now? What food choices?

Probes:

- Are their issues related to affordability?
- Availability/ Accessibility
- Ability to prepare product
- Time to prepare product
- Adequate kitchen and food preparation facilities
- Child's likes and dislikes
- Any other challenges

11. What would make it easier for you to make the food choices you would like to make for your children?

12. Thank you for sharing your experience in making food choices for your children. If you were to share with another mother one thing you have learned as a mother about feeding young children, what would that be?