Starting with a Clean Plate:

Re-envisioning the Dietary Guidelines through an Ethnographic Review of Domestic Cooking Practices

Maria R. Carabello

Senior Honors Thesis

Recognized as Distinguished Undergraduate Research by the Academic Awards Committee for the College of Agriculture and Life Sciences at the University of Vermont

Advised by Dr. Amy B. Trubek

March 29, 2013

Names of specific physical locations, as well as those of individuals, have either been withheld or replaced by pseudonyms for the purposes of de-identification in this written product

-- ABSTRACT --

According to the latest estimate from USDA researchers, only 3% of Americans adhere to the government's dietary guidelines which are intended to serve as the population benchmark for choosing a healthful diet.[1,2] In response, this ethnographic study explores the current situation with the aim of identifying ways by which to improve dietary health through nutritional education. In the first stage of this project I seek to understand how individuals conceptualize and express understandings of health through the context of their home-cooking practices. In the second stage, I explore barriers within the nutritional didactic model that affect how the USDA's Dietary Guidelines for Americans are disseminated, received, and utilized. Data for this project has been gleaned from ethnographic video footage of home-cooks throughout Northeastern New England, participant-observation in a nutritional cooking class in Vermont, and interviews with home-cooks and nutritional educators. This data, in the form of fieldnotes and transcripts, has been coded and analyzed and then more broadly triangulated. Through this study I have found that healthy eating and dietary adherence are complex behaviors, extending well-beyond the realm of food groups, that require a mindful negotiation of options, choices, and competing priorities. The results of this study suggest that future dietary adherence improvement strategies may benefit from understanding and addressing adherence as an involved process rather than an isolated pass/fail effort. One possible area of intervention could focus on the role of nutrition educators, and specifically the adaptive roles they can serve in helping their clients navigate a path towards improved dietary adherence, and ultimately improved health.

KEYWORDS: ***Home-cooking, Health, Dietary Adherence, Nutrition Education, Ethnography***

-- INTRODUCTION --

The USDA Dietary Guidelines for Americans (DGA) most recently revised in 2010, are intended to serve as the population benchmark for "choosing a healthy eating pattern." (USDA 2010: i) However, ever since the first version of these guidelines was introduced in the late 1970's the topic of adherence has been a relevant point of inquiry. (Palmer 2009) The most

[1] Palmer, Sharon. "Get Ready for the 2010 Dietary Guidelines." *Today's Dietitian*, December 2009, 20.

[2] U.S. Department of Agriculture (USDA) and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2010.* 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010.

recent estimate presented by Dr. David Klurfeld, a national program leader of human nutrition at the USDA Agricultural Research Service, suggests that less than 3% of the population actually complies with the government's dietary guidelines. (Palmer 2009: 20) This statistic comes from an extrapolation of data looking at food consumption, body weight maintenance, as well as physical activity levels amongst members of the US population. (Palmer 2009: 20) In isolation, Klurfeld's statistic raises some red flags. Yet, pair this with a continued increase in rates of obesity (from 33.8 to 35.7% of US adults between 2008 and 2010), a dietary-related condition associated with adverse health outcomes affecting virtually every organ system, and addressing methods in order to improve health through one's diet becomes even more compelling. (Flegal et al. 2010: 235; Ogden et al. 2012: 1; Mayo Clinic Staff: 2012)

Given the potential for promoting health and lessening the prevalence of dietary-linked diseases, many strategies for improving dietary adherence have already been explored by nutrition and public health researchers. A review of many of the solutions that have been proposed and implemented reveals a common focus on the role of health and nutrition educators to translate the guidelines for enhanced understanding and improved adherence. (Lichtenstein and Ludwig 2010; Nestle 2010; Palmer 2009: 20) Another common approach is the promotion of self-help methods, and in 2011 the guidelines' iconic pictorial guide was revised from 'MyPyramid' to 'MyPlate' in the hopes that this change in visual representation would more effectively educate consumers about how they could fill their plates at every meal in better adherence with the dietary guidelines. (Neuman 2011; Post 2011: 349-50) Through this qualitative ethnographic study I approach the issue of improving dietary adherence from the perspective of ordinary citizens[3] operating in their natural settings. In seeking this lay perspective

[3] Here, the term '*ordinary citizens'* refers to individuals in the U.S. population who have no nutritional expertise or education that would be acquired through advanced job-training or a higher-degree program.

I aim to gain a deeper understanding of how social, cultural, and behavioral influences might affect an individual's ability and desire to adhere to guidelines surrounding their eating practices. This sort of understanding could prove useful to nutrition educators who seek to develop and implement new strategies for helping their clients improve their health through their dietary choices. Dr. Carole Bisogni of Cornell University emphasizes this view in a recent special publication for the *Journal of Nutrition Education and Behavior*, "Because of its potential to advance understanding of social and behavioral aspects of food and eating, qualitative research continues to gain importance in the fields of food, nutrition, and health." (Bisogni et al. 2012: 282)

It has been well-established that efforts to improve dietary adherence have a promising potential to promote health and begin to reverse dietary disease trends at the US population-level. However, the actual concept of health that is promoted by the guidelines and these dietary improvement strategies is not quite as well understood. In a 1997 study, Margetts and a team of researchers from the University of Southampton point out that as an international standard many health promotion programs (such as the dietary guidelines) claim to promote a 'healthy' diet, but rarely specify precisely what that may mean beyond the generalities of promoting good health and mitigating chronic disease. (Margetts et al. 1997: S23) Pairing poor levels of dietary adherence amongst the US population with a lack of consensus on the meaning of 'health' being promoted has compelled me to pursue the following research questions over the course of this project: 1) In what ways and to what capacity do people think about and express ideas of health through their daily cooking practices? And, 2) how could adjustments in the dissemination of the USDA's Dietary Guidelines for Americans potentially accommodate these broader understandings of health and wellbeing? I have approached these questions through the specific

qualitative methods of ethnography due to the strong emphasis that they place upon "exploring the nature of particular social phenomena." (Atkinson and Hammersley 1994: 248) Since cooking, eating, and navigating one's food environment are inherently social behaviors and actions this approach proved especially appropriate. The explorations I have made throughout this study have focused upon the practices of home-cooks and nutritional educators to gain a deeper understanding of not only how healthy eating is perceived by individuals, but to also consider how nutritional education strategies can help individuals improve their eating habits in practical and meaningful ways. These considerations are intended to help illustrate the complexities surrounding healthy eating and dietary adherence as behavioral processes requiring a negotiation of options, choices, and competing priorities on part of the individual.

-- REVIEW OF THE LITERATURE --

The first question explored in this study seeks to contribute to a growing body of literature which acknowledges that understanding how individuals think about and attribute meaning to health in the context of their eating practices can help to shed light on strategies that may aid these individuals in eating both healthfully and meaningfully. Many of these efforts were recently summarized in a 2012 meta-review of qualitative healthy-eating studies performed by Dr. Carole Bisogni and a team of researchers at Cornell University. These researchers compiled and analyzed 195 peer-reviewed journal articles completed in developed countries since 1995 that explored how individuals interpret and perceive healthy eating. (Bisogni et al. 2012) The researchers found that "study participants explained healthy eating in terms of food, food components, food production methods, physical outcomes, psychosocial outcomes, standards, personal goals, and as requiring restriction." (Bisogni et al. 2012: 282) These findings seem to suggest that while individuals do understand healthy eating in terms of the food group

recommendations summarized by the DGA, their perceptions of healthy eating also extend beyond these recommendations to include other areas of meal preparation and consumption. This suggestion is significant in light of my current study, as it helps to reveal the complexities of healthy eating as a behavioral process necessitating a wide variety of considerations and negotiations to be made by individuals before, during, and after actually eating a meal. Therefore, the widely informed theoretical framework summarized in this meta-review serves as a particularly useful foundation upon which to situate and potentially challenge or strengthen the findings from my own more regionalized effort.

Turning towards the literature surrounding the Dietary Guidelines for Americans as a place for possible health interventions there have been some recent studies that complement the goals of my current project. A 2011 study completed by Stewart et al. has sought to determine whether low-income individuals (defined as being on the 'Thrifty Food Plan') could actually afford the daily servings of fruits and vegetables recommended by MyPyramid. The study concluded that through modest budgeting and diverting some of the money spent on calorically-dense and nutritionally-sparse food items, low-income individuals can afford to eat fruit and vegetables in the amounts recommended by MyPyramid. (Stewart et al. 2011: 176) Stewart et al.'s study has targeted financial barriers as the primary deterrent against buying fruits and vegetables, but the possibility remains that other limitations such as physical access, personal preference, and/or time availability could also contribute to an individual's disinclination to purchase these foods. The exploratory approach of this current project has the potential to allow such additional factors to surface.

In considering the role that the DGA and accompanying pictorial guides might play in dietary health intervention schemes it becomes important to first gain an understanding of the

current level of population awareness of these materials. Quinlan and a team of researchers from Drexel University recently explored this question through administering a widespread survey to college students. The survey was designed to garner an understanding of the students' interactions with and opinions of the new MyPlate DGA visual. (Quinlan et al.. 2012) The researchers found that MyPlate is viewed as a simple and visually appealing tool that may prove useful for dietary planning amongst this subset of the population. (Quinlan et al. 2012: A-85) The broader range of participants included in my own research effort may help to further this substantive yet demographically-limited conclusion, while also considering barriers that impact MyPlate's ability to influence change in an individual's dietary choices.

One potentially promising method to increase population-level awareness, understanding, and compliance to the dietary guidelines is to consider the role played by educators. As such, the second focus of my study design explores how nutrition educators act to disseminate information from MyPlate specifically, and the DGA more generally. In a commentary piece directed towards these educators, experts of the USDA's Nutrition Policy and Promotion Department offer the following message to nutritional educators concerned with the complex task of translating the new MyPlate pictorial guide into improved diets for their subjects:

> With several months of MyPlate/Dietary Guidelines implementation experience, USDA has heard from numerous nutrition educators. Many have questions regarding the simplicity of MyPlate; the recommended foods and amounts to eat in each group; the size of the plate; applying MyPlate to various meal occasions (such as breakfast and snacks); and using MyPlate to convey combination foods. These are great questions and can be answered simply— MyPlate serves as a colorful, universal, and appealing graphic that is foundational for nutrition educators to tailor for various audiences, age groups, cultural eating patterns, meal settings, and learning levels. It cannot be more strongly conveyed that nutrition educators' expertise in applying MyPlate in these situations will be essential to help consumers adopt healthier habits! (Post, Harvey, and Maniscalco 2012: 98)

The interviews I conducted with nutrition educators throughout this project support this emphasis upon the role of the educator in disseminating the dietary guidelines. Additionally, an analysis of these transcripts has helped to identify particular methods and approaches that may allow nutrition educators to effectively serve this role in the diverse range of situations and contexts recognized here by Post et al., in order to best meet the needs and goals of their clients.

The following account of the methods I used in this study, as well as the methodologies behind them, will help begin to situate my current study within the broader framework provided through this literature review.

-- METHODS AND METHODOLOGY --

This study has taken an ethnographic approach lending deep insight into the health perceptions of home-cooks across Northeastern New England as well as the practices of nutrition educators in the state of Vermont. Beyond emphasizing and exploring the nature of social phenomena and conditions, ethnography is also characterized by a tendency to examine an isolated or small number of cases in great detail. (Atkinson and Hammersley 1994: 248) Thus it is by design that the methods I utilized in this research were selected to prioritize depth over breadth. However, this characteristic of ethnographic research makes it necessary to practice triangulation through situating one's findings in the context of related studies. This practice can help strengthen one's conclusions and make the study compelling beyond the direct cohort studied. This effect can also be achieved by repeating similar studies in a diversity of locations and sites and comparatively analyzing the results to make sense of both similarities and differences. Yet, for the purposes of my own research effort triangulation has proven the most appropriate and realistic method.

I have sought to approach this study from a neutral standpoint free of preconceptions, but like most qualitative researchers I acknowledge that complete objectivity is impossible to achieve when immersed in studying social phenomena and behaviors in their natural context. Following an interpretive approach I have sought to allow the rich observations and narratives collected throughout this research to contribute towards a well-rounded understanding of the realities faced by both home-cooks and nutrition educators. As acknowledged by researchers collaborating upon the "Qualitative Research Guidelines Project" for the Robert Wood Johnson Foundation, "Interpretivist positions are founded on the theoretical belief that reality is socially constructed and fluid. Thus, what we know is always negotiated within cultures, social settings, and relationship with other people. From this perspective, validity or truth cannot be grounded in an objective reality." (Cohen and Crabtree 2006) The methods of film review, participant-observation, visual fieldnoting, interviewing, and coding and analysis have allowed me to gain this form of understanding and parse the resulting data for greater significance and potential application.

Ethnographic Film Review –

As a junior in UVM's Honors College I began working with my project advisor, Dr. Amy Trubek, to review ethnographic videos of individuals cooking meals in their home kitchens. These videos were collected as part of a broader on-going ethnographic cooking project undertaken by Dr. Trubek and her graduate students, and were filmed between 2006 and 2009 in domestic kitchen spaces across the state of Vermont as well as the more urban environment of Boston, Massachusetts. The subjects for this project were primarily recruited through the technique of snowball sampling, first identifying individuals by word-of-mouth with additional connections formed on the recommendation of the initial interviewees. I independently reviewed a total of seven of these films and coded each of them using time-stamp markers during scenes in

which the individuals alluded to the theme of health through either words or actions. These preliminary observations became the seeds of thought which have developed into the more focused research questions which have guided this project.

Participant-Observation –

The participant-observation portion of this project was conducted in the fall of 2012 during a two-hour nutritional cooking class for adults taught by one of the educators for UVM's Expanded Food and Nutrition Education Program (EFNEP) at an undisclosed location within the state. In order to gain admittance to this space I had to agree to refrain from note-taking in front of the class participants, and to assume the role of an aspiring EFNEP educator. These precautionary stipulations were due to factors surrounding the legal background and past experiences of many of the women enrolled in the course. While participant-observation allows for varying depths of involvement, I assumed what sociologists Peter and Patricia Adler describe as an "active" positioning within their 'Three Membership Role' model. This model sections the stances that can be undertaken by the participant-observer into 'peripheral,' 'active,' and 'complete,' essentially spanning the breadth of possibilities from full-observer to full-participant. (Watt and Jones 2010: 112) My intermediary position afforded me enough distance to maintain some degree of objectivity in my observations, while also allowing me to contribute to the process of meal preparation in a modest act of reciprocity. This active involvement additionally facilitated my ability to build rapport with the class participants over a relatively brief time period. Rather than taking traditional notes and jottings during the class itself I waited to do so until I had left the site and was out of the presence of the participants. To facilitate and maximize my recall I also self-narrated and recorded my experiences with my iPhone while commuting back to campus. This audio file was later transcribed into a set of raw notes to aid in my analysis.

These strategies, along with my visual fieldnotes described below, helped me to maximize the retention of the insights and observations that came out of this experience.

Visual Fieldnoting –

Prior to the start of the EFNEP class in which I conducted my participant-observation work, I spent nearly two hours with the course instructor helping her to set-up for the class while also discussing her work with this program. During this time I was permitted to take pictures of the empty space of the kitchen before the class members had occupied it. I also was able to visually document two key locations in the surrounding community food environment through visiting a nearby convenience store and the local food shelf. This methodological practice allowed me to preserve a significant level of detail and raw observations from my experience in the field. As seasoned visual ethnographer Pink states, "When ethnographers produce photographs or video, these visual texts, as well as the experience of producing and discussing them, become part of their ethnographic knowledge." (Pink 21: 2007) In the moment of taking these pictures my attention was drawn to subtle visual cues and experiential markers that helped to organize my focus and overall approach as a participant-observer. Since departing from this fieldsite I have revisited these visual artifacts on numerous occasions, which has allowed me to distill the memories of what happened before, after, and during the taking of each photograph into raw field notes to aid my analysis.

Interviewing –

Over the course of this project I conducted four interviews with EFNEP educators within the state of Vermont. Each interview followed a semi-structured approach based upon a set of questions drafted specifically in light of the goals of this project (see Appendix One attached). The interviews lasted approximately one-hour each and were conducted at locations chosen by the interviewees for optimal convenience. My project advisor and I recognized UVM's EFNEP

program as a particularly valuable place to identify nutrition educators to interview for this study since their role as disseminators of nutritional information through instruction that integrates meal preparation uniquely encapsulates my two main research questions. Through consulting with the EFNEP program coordinator, four ideal candidates were identified out of the pool of educators. All of the interviews were recorded using an iPhone application with the explicit verbal consent of the interviewees and the audio files were transcribed verbatim. During the transcription process the interviewees were also each assigned a non-attributable pseudonym for the purpose of de-identifying their responses. The resulting transcripts were returned to the interviewees for review prior to being coded and analyzed as data for this study. All stages of my fieldwork with UVM's EFNEP program were approved for the purposes of this study by the University of Vermont's Institutional Review Board (IRB), and my analysis of my advisor's pre-existing video footage and interviews were approved under the title of her original project.

Coding and Analysis –

The transcripts from the interviews with the four EFNEP educators along with health-themed excerpts from sixteen transcripts that resulted from interviews with individuals who took part in my advisor's ethnographic cooking project were all hand-coded according to common qualitative procedures. My approach to coding followed three distinct stages: open coding, axial coding, and selective/systemic coding. After first reading through the data for familiarity of content, in the first-stage of 'open coding' I went through and assigned codes, or tag words, to each passage or line of the text. In the next phase, 'axial coding,' I connected the open codes by linking such interactions as causes and consequences, conditions and interactions, and strategies and processes. In the last stage, 'selective or systemic coding,' I sought to draw broader connections within the dataset and began to envision the interaction of the axial codes in a working analytical model. (Charmaz 2006; Neuman 2011: 510-7) This approach was appropriate

for this project as it allowed me to acknowledge the nuances of the dataset, thus yielding rich insights and understandings that could be applied towards answering the questions that guided this project.

-- RESULTS AND DISCUSSION --

Defining Health through Domestic Meal Preparation –

On the 'Frequently Asked Questions' page of the Agricultural Marketing Service's section of the USDA's website the question was posed, "How do USDA, Treasury and Health and Human Services define 'healthy food'?" With the following answer provided, "These three programs seeks [*sic*] to increase access to whole foods such as fruits, vegetables, whole grains, fat free or low-fat dairy, and lean meats that are perishable (fresh, refrigerated, or frozen) or canned as well as nutrient-dense foods and beverages encouraged by the 2010 Dietary Guidelines for Americans (DGA)." (USDA 2013) From this answer it is evident that the U.S. government and most nutritional professionals would define dietary health through adherence to the dietary guidelines, and specifically in terms of food group recommendations. This is expected, as the government and its team of nutritional researchers and practitioners has worked to create these guidelines with the very mission of helping individuals achieve health through their dietary choices. However, in designing this study I have sought an additional viewpoint that portrays how members of the U.S. population understand health through the practice of meal preparation. Do the individuals for whom these guidelines were created view and understand health in the same way the experts do? As it was emphasized by Bisogni and her research team in their 2012 meta-review, "The rich descriptions and concepts generated by qualitative research can help practitioners and researchers think beyond their own experiences and be open to audience members' perspectives as they seek to promote healthy ways of eating." (Bisogni et al.

2012: 282) The following account narrated by the home-cooks in this study is intended to contribute to this effort.

Health through food-sourcing and ingredient selection –

"I'm not like an elitist localvore, but I just have a real passion as a localvore I just love the idea of using stuff that is really fresh and tastes really good and [is] really nutrient dense." This excerpt comes from an interview conducted with a woman named Ruby who lives in Vermont and participates in a local Community Shared Agriculture (CSA) program. Her statement helps to demonstrate that considerations about health in the meal preparation process often begin long before the food enters the kitchen. In Ruby's case these considerations come into play when the food is still out in the field, as she cites the freshness and related nutrient density of the foods in her CSA share as an enticing quality. Dana, a mother of a teen-aged daughter who comes from a farming family shared Ruby's view, "I like fresh. I'm a fresh fish and fresh vegetable snob a little bit." While the freshness of food was a common ideal and aspiration for the majority of participants, the actual source of that food, as well as the ease of procuring it, was much more variable even within this relatively geographically-confined sample. Rosi, a married woman from Trinidad who now lives in the suburbs of Boston, likes to shop at her local Whole Foods market for reasons similar to both Ruby and Dana; freshness and inspiration. Another market-goer, Art, a retired gentleman from Vermont who has transitioned to living as an empty-nester with his wife, describes his shopping motivations as thus, "I will go out in midday and go to the grocery store or the coop to see what's fresh or what looks good and then...I'll decide what to cook."

However, in the absence of leisure and the convenience of options, finding fresh food at some markets can mandate a heightened level of intent and strategy on behalf of the shopper.

Deborah, a mother from upstate New York aptly explained her own navigation strategy for food shopping which entails restricting herself to the peripheral aisles of the supermarket to find ingredients with optimal freshness and minimal processing. Yet, for Hilary, a graduate student in the city of Boston, acquiring fresh foods can represent an even greater challenge whether she sticks to the peripheral aisles or not. As she puts it, "I'm always a little frustrated because where I live I feel like the options aren't real great and if I do want a little healthier option, it's even that much more expensive so I get trapped in this do I eat healthy or do I spend money or where do I go." Later, after being prompted by her interviewer to reflect upon whether her opportunities for food access were limiting in anyway, Hilary admitted, "Yeah, actually this past fall I fell into this habit of eating out and getting, this is horribly embarrassing, getting groceries at 7-11, you can imagine what my groceries looked like." Whatever the imagination conjures, it is pretty safe to say that Hilary's gas station groceries had little resemblance to the fresh "salad turnips" and "carrot greens" that Ruby can count on receiving in her local CSA share every week.

It bears mention that the CSA and various food markets aren't the only food-sourcing options. For Vermonter Miranda and her husband and kids, the ingredients for making dinner are literally right in their backyard, "...we raise beef and pigs and so we eat mostly pork and beef because that's what we raise so we know it's healthy, we know what it's been fed, we know where it's been slaughtered." Beyond the definite freshness factor Miranda brings up another key health consideration involved in food-sourcing, which is transparency of production and processing practices. This particular consideration was discussed prominently by individuals whilst reflecting upon the challenges of eating out and surrendering control over the source and preparation of their meals. As one young mother, Alison, admits, "I'm pretty fussy about what take-out I consider...I want local foods or I want food that's prepared in a way that I would

prepare it." Rachel, another mother with four children says about her family, "...we don't eat out very often and when we do we go to Flatbread or something which is almost all local, organic. We know all the farmers, they're friends of ours, it's their cheese or their garlic on the pizza we're eating and it's our friends who are the chefs so they can tell us exactly how they made everything on there." These statements speak to the level of distrust, unease, and disconnection that can arise when the home-cook surrenders their control as the sourcer and preparer of meals in their own homes to strangers operating in more distant areas of the food system. In such situations there seems to be a desire to ensure the health of the meal through quality openly-sourced ingredients (described by these participants as local, fresh, and organic) as well as familiarity with the preparation methods being used.

At this preliminary stage of the meal preparation process, it is clear that people are already prioritizing health through considerations surrounding the freshness of ingredients, the transparency of their sourcing, and in the case of eating outside of the home, the amount of familiarity and trust the diner has with the meal preparer who harnesses ultimate control over the preparation. However, as seen through the experiences of both Deborah and Hilary these aspirations for healthy food-sourcing may require dedicated shopping strategies and both financial and temporal budgeting sacrifices in order to become actualized practices.

Health through meal preparation –

Once the groceries are in the door, the food share is unpacked, and/or the backyard livestock has been slaughtered, butchered, and stored the next logical step is to cook or prepare the meal. As seen in the discussions of food-sourcing, control was a common theme in how individuals spoke about how they ensure that the meals they make, eat, and serve to others are healthy ones. Rosi was a vocal advocate for the importance of maintaining control through

cooking explaining that, “Why I make dinner as opposed to someone else...I’m controlling what’s going into it. Without a doubt, I have control over it.” This control is especially important in allowing the individual to serve food that they deem to be healthy. Rosi offered the following example to further clarify why she likes to take charge in the kitchen rather than pass the duty off to someone else, “For example, if we make salad dressing, it calls for a certain amount of oil, I will cheat and put more water and vinegar and less oil...” Rosi was not the only one to use salad dressing to express this message. This practice was also utilized by Alyssa, a woman in her mid-sixties living outside of Boston who mentioned in her film clip that she made her own dressing both to save money and to avoid all the “fake-y stuff” in store-bought dressings. Lydia, a young career-woman from Vermont, expresses the same ideology towards preparation more generally, “I really enjoy knowing what’s going into my food, honestly, like I know how much salt is going in...” For Deborah, control and restriction were priorities as well, “...we wound up cutting way back on sugar and I learned how to use recipes and maybe not put the full amount in and realize that they still can taste good even without...a whole cup of sugar added...So [I] just started modifying things...just being a little more careful with preservatives and things like that in our food.” In exercising control in the kitchen these women are able to restrict the amount of additives included in the meals they prepare, most commonly fat, salt, sugar, and preservatives, which they viewed as being unhealthful. Notably, the theme of control and restriction as health meanings were also significant themes in a total of fifteen of the studies reviewed by Bisogni and her research team. (Bisogni et al. 2012: 289)

Beyond exercising control and restriction, the home-cooks also expressed their views about what makes a meal healthy or unhealthy through discussing inclinations towards certain cooking methods along with a conscientious aversion of others. When the home-cooks were

describing what they considered to be a healthy meal, the most common preparations mentioned were grilling, baking, or serving raw in the case of salads and fresh vegetables. Many also noted that frying, especially with butter, was a practice they sought to avoid. As Ana, a Russian native who moved to the United States after college, explains, "...[I try] not to use a lot of fat when I fry something. Though I do like to fry things in butter because it tastes better, but just staying away from that." This particular statement explicates how home-cooks can prioritize health through demonstrating not only control in the kitchen, but restriction as well. The aversion of butter in meal preparation for many was stated as a diversion from what they grew up with. In describing her eating ways as a child Dana explains, "...my family was a huge butter, not healthy family. Everything had...fatter the better, that's the old-fashioned...how do you make it taste good? The more butter you put in..." The home-cook often must balance multiple considerations when preparing a meal, here weighing taste and tradition against health and adaptation. One technique used to preserve flavor with minimal use of added fats, was described by Maryann, another Vermont mother whose household raises and butchers their own livestock. In describing her religious use of a particular well-seasoned cast iron frying pan Maryann says, "I scrub it out but I don't like to soap it. It takes very little butter or oil." A similar technique with non-stick pans and oil misters was used and discussed by the EFNEP educator I shadowed during her cooking lesson. From the practices of these women it can be seen that the equipment used, in addition to the preparation technique, can be critical in maintaining control over the perceived health of the final product.

The home-cooks were not just concerned about having the control to restrict amounts of fat, salt, sugar, and preservatives in the food they were preparing, but they also demonstrated concern about breaches in hygiene and food safety as well. Again, this concern was most directly

explained through imagining scenarios in which the diner surrenders complete control over the meal preparation to a restaurant chef. As Lydia bemuses, "I am totally perplexed about what happens in the (restaurant) kitchen and sometimes I kind of don't even want to know what is happening in the kitchen, let's just hope they are all clean." As Lydia suggests, the concern over control can function to restrict the incidence of foodborne illness caused by breaches in hygiene or improper food-handling.

While having control over the meal preparation was important for the home-cooks in this study, the act of preparing the meal was also described as an important opportunity to let go and relax in other parts of their lives. Dana describes the role of cooking in her life as thus, "...you walk in this house and you smell food, you smell it, so for me cooking is like I plan it out, I think about it, and it de-stresses me, I could have the worst day here and I go home and I'm like ok this is what I'm going to do." Later she further professes her fondness of cooking, "I'll come home, I'll put my sweats on, I'll go in my kitchen, it'll be snowing, I'll be happy as a clam. I love to put a little candle on in the kitchen...and I might put the television or the radio on and to me it relaxes me and I have a great sense of accomplishment. I have my workspace. I love it." Despite the fact that cooking is something that Dana admits to spending a considerable amount of time thinking about and planning out beforehand she still describes her time in the kitchen as a respite from her other duties. For Rosi cooking served as a similarly pleasurable experience, "...cooking for me is part of my everyday life and it's something that I do to de-stress, to connect with [my husband], to control what's going into my body."

For these home-cooks meal preparation can be seen as an important opportunity to exercise control over the meals they make, to restrict undesirable additives, to heed their own

psychosocial health through stress alleviation, and to form and strengthen social and familial connections.

Health through the meal –

Following the conclusion of meal preparation is the commencement of mealtime; a critical event which seemed to have a strong influence on the home-cooks' overall health perceptions. While the government might define a healthy meal through their MyPlate pictorial guide and its neat display of the five food groups, how might an average home-cook like the ones employed in this study define a healthy meal? "...The first thing that comes to mind is when I set the plate down what's it going to look like and what are people going to say." Here Carol, a single young professional living outside of Boston, brings forth the consideration that the construction of a healthy meal may be influenced by a desire to not only support one's nutritional needs, but her social needs as well. In seeking to understand the motivations that prelude the construction of a healthy meal this study has sought to explore how these considerations might both align with and/or diverge from a model in which health is defined by a balance of portioned servings from the following groups: fruit, vegetables, grains, protein, and dairy. Just as Carol starts with a clean plate as the base for planning her meals, the methodology of this study has sought to do the same in forming a definition for health grounded in the experiences of these home-cooks.

After reviewing and coding all sixteen of the interview excerpts, I was able to identify seven specific occasions in which individuals directly defined what they considered to be a healthy meal in terms of the food groups. These responses are summarized in Table One below. All seven individuals mentioned serving at least one form of vegetable at the meal, with three of them indicating that two types of vegetables should be incorporated, such as a cooked vegetable

and a raw salad, or a green vegetable and one of another color. All seven also mentioned including a protein source either generally, or with more specific mentions of fish and chicken by two of the individuals. Only one individual did not mention including a serving of grains, and two of the five who did include a grain group in their description said this was something that would maybe be included, or was not always necessary. Rice and potatoes were each cited twice as grain/starch options, and pasta was mentioned as well. Notably, not a single individual cited including fruit or a serving of dairy in their general description of what constitutes a healthy meal. Given that these descriptions were offered in the context of interviews which were primarily designed to gather information on general cooking practices these numbers are not intended to be statistically generalizable to a larger cohort, nor completely representative of these individuals' practices. The fact that not a single individual mentioned fruit or dairy in their meal descriptions is less likely an indicator that these individuals never consume food from these groups, than it is a suggestion that they might view these groups to be more superfluous to their culturally-informed idea of what constitutes a proper meal. This view was also supported by Mary, one of the EFNEP educators I interviewed, as she cites her experience in saying, "folks never really think about eating fruits with a meal like this (referring to MyPlate diagram). And I've had comments on, 'well, how would I ever do that?'" Acknowledging that the idea of consuming fruit along with the meal is a foreign concept for some individuals highlights a potential area in which adherence could be improved. Some possibilities for remediation could encourage individuals to fit fruit into the diet between traditional mealtimes, ideally in place of other snacks or desserts. Additional comments that related to food but not the food groups specifically included mention of balance, variety, portions, moderation, and color. For a

particularly well-explicated example of the role of color in a meal see Carol's entry in Table One below.

Table One: Healthy Meal Descriptions in Terms of Foods and Food Groups

"A healthy meal for me would have some protein, and vegetables, not necessarily a starch for me, but rice or potatoes, like boiled potatoes." -Ana
"Some sort of usually a fish, something, fish, rice or pasta, vegetables, salad. Those kinds of foods." -Alison
"...when I think healthy I always think protein, vegetable, and starch maybe..." -Lydia
"...it's barbecue sauce on some chicken breast and it's in the oven, and I make a salad. And for me, that is, that's a meal. When my husband cooks, it's you know, it's meat, potatoes, bread, he goes to the store, he does the shopping." -Andrea
"You do your meat, your potatoes, and your can or frozen bag of vegetables and you're done and maybe throw a bag of carrot sticks on the table and everyone's happy." -Maryann
"A green vegetable, other produce of assorted colors, a grain, and a non-meat protein source." -Ian, during filming (Rachel's Husband)
"...the first thing is what's going to be my protein source, what's going to be my protein source, what's going to be my vegetable, what's going to be my starch, and what am I going to drink, what kind of wine am I going to have. I always think color, when I think about a plate of food, even if it's in the winter, which is a very white food time period, I always want to have color and I always want to have balance..." -Carol

"So, for me I think a healthy meal is something that provides a balance and provides me the things my body needs. Doesn't always mean it is the healthiest." What initially might seem like a contradictory statement from Evan, a male professor who has been a vegetarian for over thirty years, actually reveals a deep level of insight towards the idea of what constitutes a healthy meal. Evan's statement suggests that a food's relative health is a fairly fluid concept which may more easily be understood in a continuous rather than a dichotomous fashion. Instead of healthy or unhealthy, foods often fall into a hierarchical system in which they are ranked as more or less healthy with designations made in a very comparative fashion. Since the body requires a diverse variety of specific nutrients, vitamins, minerals and overall caloric amounts it is very difficult,

perhaps impossible, to define a single food as healthy or unhealthy in an isolated and de-contextualized fashion. The introduction of this conceptual framework serves as a natural transition into considering the ways in which health conceptions may diverge from the food group model encapsulated by the dietary guidelines.

Upon being prompted by her interviewer to describe what is important to her about making dinner, Hilary, the graduate student from Boston, responds, "That it's something that I'm going to really enjoy the experience of cooking and sitting down and eating. Not just eating to fill my stomach or to get x boxes marked off on my nutrition sheet or whatever, but that I'm going to actually kind of have fun doing it." For Hilary, pleasure and enjoyment are key motivations behind her mealtime habits that admittedly transcend direct nutritional adherence. For others, mealtime is a crucial time to forge and strengthen familial bonds. Her passage lends itself to the idea that meals have meaning and significance beyond direct health motivations. The following passage from Andrea, a native Vermonter with a husband and kids who raise their own livestock and hunt wild game, speaks directly to this concept.

> ...if I didn't cook dinner (my husband) would get really frustrated, and I realized that for him, dinnertime wasn't about what I cooked for dinner or that kind of thing, it was about that was the family, like his family would sit down for, it didn't matter how long, but it seemed like it would be hours, but their family never missed a meal, it was always a happy positive thing, and so for him, dinner was huge...what is huge to him is that we actually sit down and eat as a family, cause that's family time. -Andrea

In coming together to share the evening meal, this family not only supports their health through an ingestion of food and nutrients, but fosters healthy interfamilial relationships through the act of sharing a communal meal. This was an important aspect of mealtime for Alison as well. As she describes, "...when I was growing up, we sat down to dinner every night, no matter whether

it was five o'clock or nine o'clock, but we waited for my dad to come home every night. And then we would feed grandparents and extra people almost every night of the week, so it was really a social event..." In her 2004 ethnographic novel *Around the Tuscan Table*, renowned food-anthropologist Carole Counihan similarly remarks upon the role of meals amongst her Florentine participants in maintaining the health of family relationships. She describes this meaningful practice as "commensality," literally translating to "sharing the table." (Counihan 2004: 117-38)

From the narratives of these home-cooks and the support of additional references it can be seen that individuals form complex understandings of what makes a meal healthy in relation to food groups, food qualities, overall balance and variety, as well as social connections that are embedded in the experience of sharing a meal, and "sharing the table." (Counihan 2004: 117)

Health beyond mealtime: considerations of the physical body and psychological being –

Throughout these interviews connections between food and health were drawn in relation to physical and psychological outcomes affecting both one's body and their general state of wellbeing. For Deborah, the dental health of her children became a major factor that influenced the diet of the entire family. "I probably really began to look at grains, realized that white bread probably wasn't the best way to go, that kind of thing so I changed that because of the cavities in my children's teeth...I ...all but eliminated sugar." Through looking at physical health outcomes, specifically her children's dental health, Deborah shows how causal links can be drawn between a person's diet and physical outcomes seen as related to a person's overall health and wellbeing. Food-related allergies were another example of this relationship that not only affected the allergy-afflicted individual, but their family as well. Rachel, a mother of four, discussed the challenges of having a son with sensitive food allergies, "...our son has turned out to have food

allergies and he started out that way when I was breastfeeding him. He was a wreck, he screamed for four months. Everything I ate bothered him, everything bothered him, just everything totally separate from food and including food." As a result of this she describes how she has become a stringent label checker, and how accommodating her son's dairy allergies often means that their already vegetarian family has become nearly vegan as a result of this aversion to most dairy-containing products.

Yet for some, it isn't only the immediate physical consequences of a meal that influence these food-health considerations, but the threat of long-term consequences as well. Deborah, the mother concerned about her children's dental health, expressed this additional concern through the following passage, "I think my dad died when I was 49, and (my husband's) mom was a very heavy woman...and I watched what that did to her health and then we've had friends that I've watched that have not eaten right and pay a health price and I don't want to do that, you know. So, so healthy eating is, is important."

However, physical outcomes and the threat of their future occurrence are not the only factors that influence how individuals draw links between dietary practices and health. For many, the psychological links prove just as influential. Let's turn back to Ruby, the CSA member whose comments opened the health-defining section of this paper, to see an example of how both physical conditions and mental state can jointly influence an individual's relationship with food.

> Food is a really really big part of my life, because I had some health problems, particularly *Candida*, the yeast overgrowth, and I did this four-month diet last year that was very specific, and was 80% vegetables, and all these guidelines for not eating protein with starch, so I did all these things for four months and it totally changed my relationship with food...I still really don't have dairy, sugar, wheat. Occasionally, alcohol, but I have cut that down a lot, because it makes me feel better. And, um caffeine, I don't have caffeine anymore, so it really made a difference, I am definitely a lot

> healthier now...another thing is like, how do I feel? In most of my life, I haven't eaten a lot of meat, but whenever I do eat it, it feels really good. So sometimes I just want meat, and whether that happens, I just listen to it and just go for it. -Ruby

Ruby's words paint a telling picture of how being attuned to both her physical and mental state of being allows her to monitor and remedy her situation through avoiding certain foods, and seeking out others. The complexity of Ruby's narrative helps to summarize the wide range of health perceptions and meanings that have been expressed throughout these narratives. So, do individuals view healthy eating in terms of food groups? Yes. However, as has been demonstrated by these home-cooks, this is not the *only* way individuals define health in relation to meals. In starting with a clean plate, and exploring how individuals navigate health considerations as they source food; prepare a meal; assemble, consume, and share a meal; and draw links between food consumption and physical and psychological well-being this study has sought to contribute to a growing body of literature which acknowledges that, "Understanding audiences' perspectives and experiences related to healthy eating is important if nutritional and health educators wish to gain people's attention and assist them in meaningful ways." (Bisogni et al. 2012: 282) The next logical step is to explore the nutritional didactic model to recognize approaches that may help nutritional educators bridge the gap between individuals' health perspectives and their degree of adherence to the dietary guidelines.

Teaching Health: Identifying and Negotiating Barriers in the Nutritional Didactic Model –

The second-stage of this project involved conducting ethnographic fieldwork and one-on-one interviews with four educators from UVM's Expanded Food and Nutrition Education Program (EFNEP). As noted on this program's webpage, "The objectives of EFNEP are to assist low-income families and youth acquire [*sic*] the knowledge, skills, attitudes, and changed behaviors necessary for nutritionally sound diets and to contribute to their personal development

and the improvement of total family diet and nutritional welfare." (UVM Extension 2013) In order for an adult to be eligible for EFNEP services they must be considered to have limited resources, "defined as having an income that is 185% of the poverty level or below, or, participation in a federal nutrition program such as Food Stamps, WIC, Head Start, etc." (UVM Extension 2013) Individuals who meet this criteria can self-request home visits, or more commonly these connections are facilitated by referrals from outside agencies and organizations such as the Vermont Department of Health. The other EFNEP service provided for adults is a group cooking class series that is typically organized through partnerships with pre-existing organizations that have similar eligibility requirements. (UVM Extension 2013) While designing this study my advisor and I identified this USDA grant-funded program as a particularly valuable setting for data collection that may aid in envisioning solutions to help lessen the divide between an individual's perspective on health and that held by the government's nutritional scientists and researchers. In this section I will use EFNEP as a case study to relay the potentials and problems faced by nutritional educators in disseminating the dietary guidelines to low-income individuals in the state of Vermont. Such an exploration may help to identify new approaches to aid the educators in reaching their audience through acknowledging and integrating their participants' pre-existing health perspectives and experiences.

As was demonstrated through analyzing how the home-cooks in this study conceptualize health throughout the stages of meal preparation a focus on the food groups, while not all-encompassing, is not necessarily superfluous to their own ways of knowing health. This suggests that poor dietary guideline adherence amongst the US population is likely an issue rooted in problems that extend beyond an incongruity in dietary health perceptions between practitioners and population-members. Through conversing with UVM's EFNEP educators and conducting

fieldwork in the communities in which they work I have identified some significant barriers faced by the low-income demographic with whom these educators work. Acknowledging and confronting these barriers is the next step towards allowing these nutritional educators to work more effectively with their participants in establishing foodways that align with the individual's perspectives and experiences and are realizable within his/her situational means. In many cases it is a step that the educators in this program already take in their instructional approach. Yet, the role of an EFNEP educator necessitates a continuous navigation of barriers that stand to impede their ability to reach their participants and effect change in their dietary behaviors and food choices. My analysis has clued me into the following barriers that are commonly faced and negotiated by these educators and their participants on a daily basis: receptiveness, cultural factors, financial and physical access, and individual agency.

Receptiveness –

Each of the four educators I spoke with mentioned to varying degrees the challenge of dealing with a group of unreceptive participants. One educator, Laurel, described the issue in a particularly colorful manner after remarking upon how some of her adult groups tend to be noticeably less engaged than others, "Those groups tend to be less engaged anyway, and you could be dancing on your head and they may not be engaged." Laurel's statement here acknowledges that oftentimes a lack of receptiveness is an issue that skirts the line between an instructor's ability to engage an audience and the participant's ability and openness to receive that information. She later acknowledged that this issue of disengagement on the participant's end often stems from problems rooted in his/her situation. "I think because of the situation that a lot of the people we're working with are in, that the mental health comes first. And, the physical, their situation that way would come second. If they're not happy, then physically they're not

going to care." If the individual doesn't have the psychological capacity to care about, or even consider, the information Laurel is trying to teach, then her effectiveness as an instructor becomes all but lost upon them. Whether she utilizes the most engaging visuals and instructive techniques, tailors her lessons to specific needs, or goes as far to "dance on her head" that individual likely still may never fully engage with the lessons she teaches. While Laurel's description was in regard to her group classes, this same issue was also a challenge for another educator, Alyssa, during lessons with one of her home visit clients. As she describes the situation pertaining to this specific client, "...she has major mental health issues so I've had times where I go there and we don't talk about nutrition...and so I realized that I'm not being effective so that she needs to get support in other ways before she's able to absorb any of the information that I have..." For Alyssa, and many of the other educators, it is a harsh but necessary fact to accept that all too often the clients' issues extend beyond the direct reach of the nutritional information they seek to relay.

Cultural factors –

Another theme that surfaced throughout the interviews was the idea of cultural barriers manifesting in specific regional locales as well as on a broader national scale. Alyssa spoke in great depth in her interview about the learning curve she has encountered in dealing with the various cultural habits of her clients in a very rural area of the state; a climate she described as being very different from anything she had known previous to moving to the area. After asking Alyssa what she saw to be some of the barriers her participants faced in achieving her own vision of health,[i] she suggested that one of the major barriers she faced was the area's culture. After prompting her for further explanation she replied, "...just the culture of myth...that like the rice cereal in the bottle, I mean there are so many things...not drinking anything but whole milk,

because that's how they grew up, you know, there's a lot of farm families, so that kind of mentality, that kind of culture." She also later explained that hunting, smoking, and a desire to start families and birth lots of children during one's late-teens and early twenties were additional cultural factors which she found herself having to learn about, navigate, and ultimately reserve judgment upon in order to remain well-received as an instructor. Here, the instructor's ability to reach her clients is impeded by a difference in cultural backgrounds. However, rather than trying to completely abolish or dispel these "cultural myths" Alyssa acknowledges that the most effective strategy for her is to provide information so that they can come to an appropriate decision, essentially teaching them 'why' rather than 'what.' One example of this that she mentioned was in dealing with the fact that many of her clients were putting rice cereal in the feeding bottles of their 3-month olds in order to fill them up faster. However, Alyssa's background and knowledge rooted in nutritional science tells her that this is not an appropriate practice. She describes how she attempts "...to let them know...that's not what we do, and this is why, and these are the guidelines of when you should feed your baby what, at what time, and why."

For Laurel, the cultural barrier that she found herself navigating operated on a much broader level, at one point in our conversation she stated, "I also think that the United States as a society there's certain stigmas to certain meals that are very healthy that we don't use." A little prompting lead her to reveal that one healthy meal that she finds to be overly stigmatized in this country is rice and beans. As she described, "90% of the world uses rice and beans, and here it's not always looked on as a positive meal, would be the best way of putting it." In Laurel's mind this is an outlook which can be remedied through teaching her participants new and interesting recipes for this mainstay dish, and also having them taste the results in the low-stakes setting of

her group classes. Whether this particular aversion is rooted in taste, personal preference, previous experience, or social stigma Laurel has found that the best way to work past this barrier is to prepare the meal and consume it as a class, while also emphasizing throughout the process how readily she makes and enjoys this meal herself. In this way Laurel is able to take herself off of the instructor's pedestal allowing her participants to realize that she is not giving them any information or recommendations that she doesn't try to follow herself. Again, it is the method by which Laurel navigates this cultural barrier that enhances the receptiveness of her participants.

Access –

The issue of food access was by and large the most widely recurrent theme throughout the interview transcripts as well as my written and visual fieldnotes. The major areas in which access proved an issue was in sourcing food, both physically and fiscally.

EFNEP is a program which serves the needs of low-income families, and as such it was not at all unexpected that the issue of financial access was prevalent throughout my research with this program. However, while I anticipated the presence of this theme I was still struck by the extent to which food access limitations can restrict the participants' opportunities for acquiring healthful food. In one portion of our interview one of the educators, Mary, explicated the following habit of her participants, "I guess one of the things they talk about is just not being able to afford fruits and vegetables, and I think oftentimes...they think fresh is best, and they have that perception where they should be buying fresh food all the time...they just don't realize that they can buy frozen which is just as good, and canned...it's better to eat canned than no vegetables at all." Recalling the health conceptualizations of the home-cooks in the first section of this paper, freshness was a critical component to what many individuals considered to be a meaningful aspect of health whilst sourcing their food. Yet, due to the barrier of financial access

freshness becomes elevated to an indulgence that is much less accessible to those with less substantive means. In this way competing paradigms for what is considered to be healthy can undermine the ability of certain guideline recommendations to influence an individual's practices and encourage their compliance. When prompted to remark upon her own personal understanding of health another educator, Margaret, admitted, "I love the choose local and all of that but most of the clients that I work with that's not an option for their budgets..." Again, what for some people might be a central component to their idea of what it means to eat healthfully and be healthful is not a consideration that is afforded to those who fall below a certain income bracket. Beyond limiting the individual's options for acquiring food that they may deem to be more healthful, this situation in many ways limits the extent to which the educators can help them improve their dietary choices. As Laurel stated in regards to the individuals in one of her adult group classes, "I think they're all aware of MyPlate, unless the physical cost of certain things change, or their income changes there is not a whole lot they can do." This is a very telling statement which directly acknowledges that the problem of poor dietary adherence is one that in many ways stretches beyond an individual's knowledge of nutrition.

Margaret spoke to this end in her interview as well, while also acknowledging the compounding factor that comes with limited means of transportation, "...cost is probably the biggest, accessibility, they can't always get to...a lot of them depend on the Mom and Pop stores, which, you know, don't have a lot." When the barriers of fiscal and physical access intersect it creates a confined environment which becomes very difficult for participants to navigate in a manner which would prioritize the health of themselves and that of their family. In my fieldwork I spent some time exploring the local foodscape offered by one of these "Mom and Pop stores" to gain a deeper understanding of what my options might be if I was in the shoes of the class

participants who lived in this community. As the educator I was shadowing that day suggested to me, even with larger and more economical supermarkets located within a ten to fifteen minute drive the small market in the town center often becomes a main source of food for many of the class participants due to a lack of vehicle, fuel, funds, and/or a license needed to reach the larger markets. Keeping this in mind I spent the majority of my time in the store visually documenting the types of foods that were available, how certain items were marketed, what was on sale, how things were laid out, and the price points of fresh versus processed food items. The results were very telling.

Figure One below captures the view I was greeted with upon first entering this small convenience market.

FIGURE ONE

A little inspection of this "specials" rack made it obvious to me that the precedence of offerings were greatly unbalanced. It was clear that these "special" offerings were apt to promote the sale of certain food groups over others. For example, grains (granola bars, oats, cereals), fats

(dressings, mayonnaise), and alcohol (wine) seemed to hold a clear majority over vegetables (sauce, soup), protein (peanut butter, cheese powder), and fruit (non-existent). Having seen this prominent display immediately upon entering the store definitely dialed my attention into focusing on other sale items throughout the store to see if there was any overall difference in the likelihood of certain food items being on-sale versus others, or if the imbalance of this front display was an isolated occurrence.

Within the aisles of the market my initial findings were further supported as I encountered a wall of wine with a "special" tag below nearly every bottle, and not far away was an impressively well-stocked shelf of bread which offered "giant white loaves" on special, while the wheat loaves just above were being offered at full-price (see Figure Two below). This finding added further complexity to my observations suggesting that the imbalance of offerings being sold for a reduced-price versus those at full price exists within food groups as well as between them.

FIGURE TWO

What about fresh foods, fruits, and vegetables? As Figure Three below portrays these items were available in this market, but their relative accessibility is brought into question by the comparatively low-incidence of sale items in this section. The only produce items I found to be on-sale were the ten-pound sacks of white potatoes displayed on the bottom shelf. Since potatoes, as starchy vegetables, are more nutritionally similar to grains than vegetables this further supports my other observations which suggest that fruits and vegetables are less accessible in this environment than foods falling within the grain or discretionary food groups (fats and alcohol).

FIGURE THREE

The issue of disparate sales offerings in this market becomes slightly more pressing when one considers the effect that inflated small-market prices have on the overall cost of procuring food. This impromptu trip to the market was initially spurred by the realization that the EFNEP educator I was shadowing had left the wraps needed for that day's cooking lesson behind at her office. Needing to purchase replacement wraps gave us the opportunity to directly compare the cost difference between shopping at this downtown convenience market versus a larger supermarket, such as Shaw's, where the original wraps were purchased. Since the educator had

saved her receipts we were able to later calculate that the total for the two packages of misplaced wheat wraps from Shaw's had cost $5.49, while one package of white and one of wheat at the convenience market totaled $9.08. Considering that the wraps were just one component out of many that would make a meal, I quickly realized how significant cost-markups like this could be. In a small-market environment where prices are inflated to this extent, the presence of specials and sales are arguably going to be all the more influential over an individual's food choices.

Given that the majority of participants in this program are trying to support their families on limited-incomes they often qualify for other community support services, such as local food shelves. Since the community church in which the EFNEP class I shadowed was being held contained a food shelf as well, I made a point to make observations about whether or not the offerings available to individuals through this venue would be able to round out some of the purchases they might be making at the local market. As can be surmised from Figure Four below, this was unfortunately not the case.

FIGURE FOUR

Through inspecting the offerings captured in this image a lot of similarities between the food offered here and the door specials at the market downtown (see Figure One) can be drawn. Again, there is plenty of tomato sauce and boxed mac n' cheese, and here we have spaghetti instead of oats, canned ravioli instead of soup/stew, and tuna and spam as the protein offerings rather than peanut butter. Perhaps most notable in both locations is not what is shown but rather what is not shown, suggesting a common insufficiency of fruit and vegetable sources. These initial findings beg the following questions, which would require further qualitative inquiry and quantitative analysis to answer sufficiently: How can this food environment of imbalanced offerings be navigated to create meals that match up with the proportions recommended by 'MyPlate'? Or, is it going to take restoring a representative balance in what is accessible in the food environment before individuals can be expected to balance their own plates?

The following statement from Alyssa serves to elaborate that access barriers are major hurdles for the educators as well as their clients, "...the barriers of financial and transportation are huge barriers with people that keep me from doing some of the work that I need to do with them..."

Agency –

While the access issues clearly form a major set of barriers which impinge upon an individual's ability to receive instruction and improve the health of their diets, one educator was sure to emphasize that the individual always has some degree of choice, some degree of agency within their situation. Drawing upon Laurel's experience with her participants, "One of the things you'll come across is why people eat certain foods, or why people don't change, is that they look at where they're at and say, 'This is all I have. There's nothing more, if I don't have pizza out I have nothing.' There is no other pleasure." Here again we see the role of one's mental

state as central to one's ability not only to receive nutritional education, but to improve their health through their dietary choices. While this situation might sound bleak, and it surely is for many of the participants with whom these educators work, there is always some room for change and improvement. While Laurel was both aware of and sympathetic to the barriers faced by the women in her classes, she also believed that they ultimately had to be the agents to initiate change and betterment in their own lives. As she stated during our interview, "You can decide if you're gonna be happy, it's your choice. You can decide that you're going to eat better, or not."

Empowering individuals and teaching them how to make informed decisions within their means was a central focus for all of the educators I interviewed, and the innovative and dedicated approach they took to this task was quite compelling. Given the significance and prominence this theme had throughout my research, I have termed this method "adaptive instruction."

Adaptive Instruction: Targeting the Barriers within the Nutritional Didactic Model –

Throughout my fieldwork observations and conversations with the EFNEP educators, I was struck by the commitment and perseverance they demonstrated in working to meet the needs of their clients even when faced with so many barriers. While each of the educators worked in a different area of the state and faced slightly different challenges in their work, they all seemed to demonstrate a common innovation and dedication in their instructional approach that made them uniquely effective in their roles as educators. I have termed this approach "adaptive instruction," and have come to define it as a flexible, attuned, resourceful, sensitive, and responsive approach to presenting and explicating information with the goal of presenting knowledge in a manner that may allow maximal retention and potential to initiate change. The following narrative descriptions from the EFNEP educators should help to reinforce how and why I have come to define this instructional approach through their experiences.

For many of the educators, letting the patients determine the lessons that they would cover together was central to their overall approach. As Alyssa acknowledges, "I work with people who are really struggling, and a lot of young people, young families...primarily what I focus on it comes from the client what they wanna learn..." While Alyssa integrated this flexibility into her one-on-one home visits, Margaret describes how she similarly prioritizes her participant's needs in her group classes through letting the group decide upon the final two topics in a six-week class series. In these lessons Margaret also finds it important to integrate and attempt to re-work her participant's favorite recipes whenever possible. She explains her rationale for this technique in the following passage, "I find that people are pretty set in what they kind of eat over-and-over again, so sometimes it's better to use those recipes and try to make them a little healthier." Alyssa approaches her home visits with a similarly realistic acknowledgment,"...I have them do an exercise where they build, they will build a healthy meal...of food that they already have in their house, or food that they eat, not talking about some fantasy fabulous meal that they're gonna cook, like what they have, what their kids eat..." Working within the participants' means is an important tactic for these educators as it allows them to teach lessons that their participants are not only receptive to, but have the means and resources to put into practice as well. One of the EFNEP educators learned this lesson the hard way while serving as a Peace Corps volunteer in Lesotho, as she describes, "I remember a class that I was kind of co-facilitating...one of the women after came to me and she said, 'I love your information, but I don't have any money, I can't afford eggs...' and it clicked in me then that I didn't want to spend my two years there talking about stuff that they didn't really, or couldn't do."

Once an appropriate and engaging lesson is determined the instructor's job has only just begun. Referring to her adult group classes Laurel explains her tactic for remaining attuned, flexible, and responsive throughout her lessons, "...you have to figure out if they've gotten it, you know, then you come up with a different way of explaining or teaching it." In saying this Laurel doesn't just mean that she has a few different ways of presenting something, but rather that she tries approach after approach until it clicks with each individual, because in Laurel's mind, "if your teaching way number nine doesn't work you come up with way number fifteen." Another educator, Mary, emphasized the need for maintaining a sensitive and attuned approach, "you really have to be, I think, very sensitive to their needs and also to their feelings, you know, because you're not going to get anywhere if you are bossing them around and telling them what to do..." Laurel also expressed a similar view, "I think you can learn the nutritional knowledge but you can't go and throw it at people, you have to sit there and see where they're going to be receptive to it and have a sense of when they've had enough or not." These responses clearly demonstrate the educators' commitment to reaching their participants and working with them to help them make positive changes in their diets and lifestyles.

However, as important as it can be to work within the participants' means one of the educators in particular has realized that she can also serve as an advocate to act outwardly against some of the barriers they face. Even though Laurel does not live in the communities where she teaches she makes an extra effort to acquaint herself with the food environments that her participants are forced to navigate. One issue that Laurel encountered in such explorations was the difficulty in locating the reduced-price produce at one of the local supermarkets, so she took the matter into her own hands. "They finally have a bigger sign over at Shaw's offering reduced produce. For awhile it was a tiny little sign hidden so that most people didn't know

about it...I talked with the manager and kept talking to the manager, and they have a bigger sign there now, so that was a change." Laurel's actions here are focused upon improving the choices available to her participants who navigate this food environment.

Another issue that Laurel has assumed somewhat of an activist stance upon was getting "the community gardens in the community," to help lessen the barriers of transportation as another disparate factor in community food access. A gardener herself, Laurel loves the idea of increasing access to fresh produce through community gardens, but she takes issue with the fact that many of these gardens are being constructed in areas that are not easily accessible to many of the community members with inadequate access to personal transportation. As she puts it, "If they have to get in the car and drive up to the community garden you're creating another process." Whether or not the community gardens become more accessible to her participants, Laurel also mentioned that she likes to teach them how to plant their own herbs and tomatoes to have on-hand in the warmer summer months. Evidently, her participants are pretty receptive to this idea as she mentioned, "...a lot of them will do it, I'll find out they took a garbage bag and put some potting soil in and grew a tomato plant." So, what is an adaptive instructor? To define the term experientially, it is the instructor who spends her time off-the-clock making small but significant changes in her clients' food environment one supermarket, and one tomato plant at a time.

-- CONCLUSIONS --

Through this ethnographic study I have sought to shed light on the following questions: 1) In what ways and to what capacity do people think about and express ideas of health through their daily cooking practices? And, 2) how could adjustments in the dissemination of the USDA's Dietary Guidelines for Americans potentially accommodate these broader

understandings of health and wellbeing? Drawing upon the experiences and narrations of the home-cooks it was shown that health is a consideration that spans throughout the meal creation process to include factors such as freshness, transparency, familiarity, and control over the ingredients sourced; control, restriction, stress alleviation, and social connection during preparation; consideration of food groups, food qualities, balance, variety, and commensality at mealtime; as well as physical and psychological outcomes stemming from the meal itself. This complex set of understandings and considerations helps to illustrate the ways in which an individual's perceptions of healthy eating extend beyond the food groups and concepts detailed by MyPlate and the dietary guidelines. The overlap between the findings that surfaced from this study conducted with a small group of participants from Northeastern New England bears substantive resemblance to the findings of the meta-review of 195 qualitative health studies compiled by Bisogni and her research team which concluded that, "study participants explained healthy eating in terms of food, food components, food production methods, physical outcomes, psychosocial outcomes, standards, personal goals, and as requiring restriction." (Bisogni et al. 2012: 282) Comparatively situating this smaller regional study within the multitude of similarly aligned studies conducted in developed countries across the globe helps to triangulate and strengthen these findings beyond the direct cohort I studied.

Turning to the second question, the findings from my fieldwork with the nutrition educators of UVM's EFNEP program suggest that poor dietary adherence is a problem primarily rooted in navigating barriers within one's food environment, rather than an aversion or misunderstanding of the dietary guidelines themselves. As Bisogni recognized in her 2012 meta-review, "People may understand the scientific advice related to healthy eating, but they may be unwilling or unable to follow through in their behaviors." My findings support this view, and

further suggest that an individual's inability to navigate their food environment stems from barriers most prominently in the forms of access and agency. As was detailed by the EFNEP educators, barriers of this sort can prove very limiting for individuals and can determinatively constrain one's options when seeking to source, prepare, and serve healthy meals for themselves and their families. These barriers help to illustrate that, similar to the concept of healthy eating, dietary adherence is more complex than a pass/fail view focused strictly on food group recommendations could ever capture. Ultimately, dietary adherence is a process that challenges an individual's own will and intentions throughout a complex negotiation of options, choices, and competing priorities. Recognizing and seeking to address the barriers that can arise throughout this process represents a compelling area in which to focus additional research efforts.

As many of the educators alluded to in our conversations, the concept of eating local and organic remains a distant ideal for their clients, yet for Ruby, the Vermonter with a professed love for fresh food from her CSA share, these same qualities are central to her understanding and daily engagement with healthy eating. These two experiences are illustrative of a spectrum of health, as an actualized state of being, ranging from situational to ideal. The polar end of situational health would involve access barriers that are so restrictive and immutable that an individual has no agency at all over taking steps to improve their own health. The opposing idyllic side of this health spectrum would involve a total alleviation of access barriers leaving the individual with full agency by which to achieve their health perceptions at any cost or length. These conditions represent the extremes, and the likelihood that many individuals live and operate at these distant ends is improbable. It is far more likely, based upon the observations and narratives resulting from this explorative research, that the majority of individuals operate

somewhere in the middle faced with varying degrees of access barriers as well as opportunities afforded by the agency they can claim over their situation. This framework for viewing health has a significant potential for future application in re-envisioning how educators can more effectively disseminate the message of the dietary guidelines to individuals from a diversity of backgrounds and circumstances, while simultaneously targeting the barriers that most directly complicate their ability to progress along the path towards improved dietary adherence.

-- FUTURE DIRECTIONS --

One question I have become confronted with over the course of this research involvement has been, is poor dietary adherence a problem rooted in an individual's attitude and behaviors, or is the problem rooted in their ability to navigate a complex model of options, choices, and competing priorities? While the answer likely falls somewhere in between these two situations, my research with the EFNEP educators in the state of Vermont suggests that the most restrictive obstacles to improving adherence arise from this complex navigation of external barriers in an individual's food environment. Despite the geographic and demographic limitations of my study, the depth of my explorations has succeeded in highlighting some worthy considerations that could be integrated and challenged within a new educational model for promoting dietary adherence.

Throughout my research with UVM's EFNEP program I took note of a common set of strategies that the educators utilized which helped them to navigate the barriers faced by the low-income individuals in their programs, ultimately allowing them to make the healthiest choices available within their means. Due to its potential for allowing dietary recommendations to be tailored to an individual's needs and circumstances, I have termed this approach "adaptive instruction" and outlined the efforts it entails here: working within participants' means,

identifying accessible food options, teaching key skills like budgeting, shopping strategies, and food preservation skills, maintaining an attuned and sensitive approach, and advocating for enhanced food access opportunities. I believe that designing an intervention strategy that could integrate and challenge the reach of these adaptive methods across more geographically and demographically diverse samples will prove a compelling next step in future efforts to improve dietary adherence, and ultimately the health of individuals.

Another important area of consideration that arose over the course of this project was spurred by the predominance of female versus male participants within the group of home-cooks, EFNEP educators, and cooking class participants that took part in this research. In light of the involved and potentially burdensome tasks that are involved with sourcing, preparing, and distributing food to one's family, this gender bias reflects a considerable misbalance in the distribution of food-related obligations and responsibilities amongst members of the household. This food-centered gender bias aligns with what sociologists have come to describe as the "nutritional gatekeeper" role that has been traditionally served by women. (McIntosh and Zey 1989) However, a more recent effort led by eating behavior specialist Dr. Brian Wansink sought to, "examine gatekeepers who (are) accomplished, good cooks and who may not necessarily be a housewife, a mother, or female." Through transgressing the gendered boundaries that have long attributed this gate-keeping role to women, efforts such as Wansink's can spur consideration of how the duties of meal preparation can be more equally distributed between the genders. Therefore, in considering how to move forward with dietary adherence improvement strategies I call upon potential readers and future researchers to consider how a new education-based model could facilitate a more equal distribution of meal preparation duties between males and females. In my view, an approach to improving dietary adherence that focuses on the overall process

rather than the pass/fail consumption stage has the potential to breakthrough pressing barriers and impediments, while also challenging the tradition that has placed the responsibility of adherence more upon women than men. The path towards improved dietary adherence and overall health can, and should, be a path that also leads towards greater gender equality.

-- ACKNOWLEDGMENTS --

First and foremost I would like to acknowledge the contributions of the participants in this study whose collective knowledge and experience has become the foundation for both this project and my own deeper understanding and appreciation of the topics explored. Family and friends, professors and peers; thank you for seeing me through this accomplishment as well as the rigors and rewards of the past four years. To my thesis advisor, Dr. Trubek, thank you for lending me your resources, your support, and your wisdom throughout this process. Dr. Mares, thank you for opening my eyes to the reach of ethnographic methods and my own potential as a student, a researcher, and a person. To my academic advisor, Dr. Harvey-Berino, I am so very appreciative of your unwavering support at every step of my career at UVM. Also, a shout-out to coffee farmers, roasters, and distributors around the globe; your contributions throughout this project have been instrumental.

-- REFERENCES --

Atkinson, P. & Hammersley, M. "Ethnography and Participant Observation." In NK Denzin and YS Lincoln (Eds.) *Handbook of Qualitative Research* (pp. 248-261). Thousand Oaks: Sage Publications. (1994): 248-261

Bisogni, Carole A., Margaret Jastran, Marc Seligson, and Alyssa Thompson. "How People Interpret Healthy Eating: Contributions of Qualitative Research." *Journal of Nutrition Education and Behavior* 44, no. 4 (July 2012): 282–301.

Charmaz, Kathy. "Coding in Grounded Theory Practice" *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. Los Angeles: SAGE Publications. 2006. pp. 42-71

Cohen D, Crabtree B. "Qualitative Research Guidelines Project." *Robert Wood Johnson Foundation.* July 2006. http://www.qualres.org/HomeInte-3516.html

Counihan, Carole M. *Around the Tuscan Table: Food, Family, and Gender in Twentieth-Century Florence*. New York: Routledge: Taylor & Francis Group, 2004.

Flegal, Katherine M., Margaret D. Carroll, Cynthia L. Ogden, and Lester R. Curtin. "Prevalence and Trends in Obesity Among US Adults, 1999-2008." *Journal of the American Medical Association* 303, no. 3 (2010): 235-241.

Lichtenstein, Alice H., and David S. Ludwig. "Bring Back Home Economics Education." *Journal of the American Medical Association* 303, no. 18 (2010): 1857-1858.

Margetts, B M, J A Martinez, A Saba, L Holm, M Kearney, and A Moles. "Definitions of 'Healthy' Eating: a pan-EU Survey of Consumer Attitudes to Food, Nutrition and Health." *European Journal of Clinical Nutrition* 51 Suppl 2 (June 1997): S23–29.

Mayo Clinic Staff. "Obesity: Complications." *Mayo Foundation for Medical Education and Outreach,* August 3, 2012. http://www.mayoclinic.com/health/obesity/DS00314/DSECTION=complications.

McIntosh, Alex, and Mary Zey. "Women as Gatekeepers of Food Consumption: A Sociological Critique." *Food and Foodways* 3, no. 4 (1989): 317–332.

Nestle, Marion. "Here's a Thought: Bring Back Home Ec." *Food Politics*, May 19, 2010. http://www.foodpolitics.com/2010/05/heres-a-thought-bring-back-home-ec/.

Neuman, William. "Goodbye Food Pyramid, Hello Dinner Plate." *New York Times*, May 27, 2011. http://www.nytimes.com/2011/05/28/health/nutrition/28plate.html.

Neuman, W. Lawrence. *Coding and Concept Formation*. 7th ed. Boston: Allyn and Bacon, 2011. pp. 510-17.

Ogden, Cynthia L., Margaret D. Carroll, Brian K. Kit, and Katherine M. Flegal. "Prevalence and Trends in Obesity Among US Adults, 2009-2010." *NCHS Data Brief*. 82 (2012): 1-8. http://www.cdc.gov/nchs/data/databriefs/db82.pdf.

Palmer, Sharon. "Get Ready for the 2010 Dietary Guidelines." *Today's Dietitian*, December 2009, 20.

Pink, Sarah. "Doing Visual Ethnography." 2nd ed. In *The Visual in Ethnography: Photography, Video, Cultures and Individuals and Planning and Practising 'Visual Methods': Appropriate Uses and Ethical Issues.*, 21-62. London: SAGE Publications, Inc., 2007.

Post, Robert C. "A New Approach to Dietary Guidelines Communications: Make MyPlate, Your Plate." *Childhood Obesity* 7, no. 5 (2011): 349-351.

Post, Robert, Jackie Haven, and Shelley Maniscalco. "Putting MyPlate to Work for Nutrition Educators." *Journal of Nutrition Education and Behavior* 44, no. 2 (2012): 98-99.

Quinlan, J.J., L Lee, A Mangroo, and K Vierow. "Evaluation of MyPlate as a Dietary Learning Tool among Young Adults."*Journal of the Academy of Nutrition and Dietetics* 112, no. 9 (September 2012): A85.

Ristovski-Slijepcevic, Svetlana, Gwen E. Chapman, and Brenda L. Beagan. "Engaging with Healthy Eating Discourse(s): Ways of Knowing About Food and Health in Three Ethnocultural Groups in Canada." *Appetite* 50, no. 1 (January 2008): 167–178.

Stewart, Hayden, Jeffrey Hyman, Elizabeth Frazão, Jean C. Buzby, and Andrea Carlson. "Can Low-income Americans Afford to Satisfy MyPyramid Fruit and Vegetable Guidelines?" *Journal of Nutrition Education and Behavior* 43, no. 3 (May 2011): 173–179.

USDA. The U.S. Department of Agriculture's Agricultural Marketing Service. "Creating Access to Healthy Affordable Food: Frequently Asked Questions." Accessed February 24, 2013. http://apps.ams.usda.gov/fooddeserts/FAQ.aspx#healthyfood.

U.S. Department of Agriculture (USDA) and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2010.* 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010.

UVM Extension. "Expanded Food and Nutrition Education Program (EFNEP)." Accessed March 3, 2013. http://www.uvm.edu/extension/food/?Page=efnep.html.

Wansink, Brian. "Profiling Nutritional Gatekeepers: Three Methods for Differentiating Influential Cooks." *Food Quality and Preference* 14, no. 4 (June 2003): 289–297.

Watt, Sal, and Julie S. Jones. "Let's Look Inside: Doing Participant Observation." *Ethnography in Social Science Practice*. New York: Routledge, 2010. pp. 107-25

-- APPENDIX ONE --

Interview Question Schedule

These interview questions were designed to help both triangulate the data collected to answer the project's primary research question (In what ways and to what capacity do people think about and express ideas of health through their daily cooking practices?) by getting an instructor's perspective. More specifically however, they are designed to gain data that will help answer the secondary question (How could adjustments in the dissemination of the USDA's Dietary Guidelines for Americans potentially accommodate [experientially-grounded] understandings of health and wellbeing?)

[Target Interviewees: Nutritional professionals who teach cooking-based nutritional lessons, or instruct individuals about how to cook healthy meals based upon the principles of nutritional science. Example: UVM Expanded Food and Nutrition Education Program (EFNEP) Educators]

{Begin interviews by obtaining recorded verbal consent from interviewees along with discussion of the precautions that the researcher will take to maintain whatever degree of anonymity is desired. To follow: a semi-structured dialogue that encourages and allows the interviewee to talk openly about their work steering the discussion towards the essential topics of 'who, what, where, when, and why.' Example prompts: Could you tell me about what a typical day of work might look like for you?, What first brought you into this field? What are some of your most and least favorite aspects of your job? Tell me about a particularly rewarding day you have had at work, and one that you might have found more frustrating or challenging.}

- In the work that you just described to me, do you ever draw upon the Dietary Guidelines for Americans (DGAs) as a basis for your instruction, and if so how?

- If **not (or not often)**, why?
    - From your experience, what are the main barriers that prevent you from utilizing the DGAs in your work?
    - Do you draw upon any other published nutritional materials or guidelines?
        - Do you find this approach manageable as an instructor?
        - Does this approach allow you to translate nutritional information easily to your *instructees?
        - What sort of additional materials or references (if any) do you think would be helpful for you as an instructor, and also for the individuals you work with?

- If **so (or quite often)**, please explain your strategy for translating the dietary guidelines to your *instructees. (Use of diagrams, break down of nutrient amounts/serving sizes, read nutrition labels, etc. – *these approaches will only be mentioned if clarification/prompting is needed*)

- Do you find this approach manageable as an instructor?
- Does this approach allow you to translate nutritional information easily to your *instructees?
- How helpful is the 'MyPlate' pictorial guide that accompanies the dietary guidelines in helping you to translate nutritional information? *{show visual}*
- (**If viewed as helpful**) Could you provide me with an example of an experience you have had with an *instructee in which you found the visual guide helpful?
- In your opinion, how does this new image compare to the classic pyramid image that was used previously? *{show visual}*
- What kind of additional materials, guides, tools, or references do you think would be helpful for you as an instructor, and also for the individuals you work with?

- In your own words, how would you define 'health?'
  - In what ways does the curriculum you use in your work support this definition?
  - Are there any components of this definition that aren't supported, are less supported, or are harder to support with the curriculum you utilize?
  - Do you think that the definition of health that you described to me is universally held or understood by all individuals?
    - Could you please substantiate as to why or why not?
    - If **no**, what parts are not universal or what parts might be missing from this definition?
    - Or, do you believe that a universal definition of health could exist at all?
      - If definition of health is **not** believed to be universal:
      - What sort of health-defining components might be more variable between individuals?
      - Are there any components that might be seen as less prone to variability/circumstance?
  - What do you think some of the main barriers to achieving this vision of health are for your *instructees?
  - Do you address any of these barriers towards achieving health in your curriculum?
  - Do you think changes in the broader dissemination of nutritional knowledge could help in lessening these barriers for your *instructees? Please elaborate as to why or why not.
  - If **so**, what do you imagine these changes could look like?
  - If **not**, who do you think should be responsible for addressing these barriers? (Should this be seen as a responsibility of the individual, government, medical professionals, nutritionists, social workers, etc.? – *these factors will only be mentioned if clarification/prompting is necessary*)

*For purposes of generalization in this interview schedule the term 'instructees' has been chosen to represent anybody seeking the professional skills or guidance of the interviewee. Depending on the practitioner's specific job title these individuals will likely be identified (and referred to in the actual interview) as students, class members, patients, clients, etc. as appropriate.

-- NOTES --

[i] Alyssa defined what health meant to her as a productive integration of one's physical, mental, social, and environmental beings, which was notably similar to the model proposed by Ristovski-Slijepcevic, Chapman, and Beagan in their 2008 study which broke an individual's ways of knowing health into three categories: cultural/traditional, mainstream, and complementary/ethical. (Ristovski-Slijepcevic 2008)