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# Implementing a Healthy Diet in the Intellectual Disability Residential Community

Stephanie Michelle Shelton  
*Walden University*

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# Walden University

College of Social and Behavioral Sciences

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Stephanie Michelle Shelton

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Walden University  
2018

Abstract

Implementing a Healthy Diet in the Intellectual Disability Residential Community

by

Stephanie Michelle Shelton

MSW, Governor's State University, 2006

BSW, Olivet Nazarene University, 2005

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Psychology

Walden University

May 2018

## Abstract

The problem addressed in this study was how staff working in a residential agency for individuals with an intellectual disability (IID) make decisions about how to implement a healthy diet. The purpose of this study was to identify the influences on decisions made by staff on the meals they provided to their clients with an IID. The theory of planned was used to study the influences of attitude, subjective norms, and perceived behavior control on the meals provided for IID. The key research question explored how staff members make decisions. A qualitative case study design was used. The 12 participants in the study represented 3 levels of personnel (cases) in a residential agency that served the IID population. Individual interviews were conducted, and within-case and across-case analyses were employed utilizing the theory to note similarities and differences in meal planning, preparation, and implementation. Pattern matching was used to compare results from the study with previous research findings. Results showed that clients had a greater influence over meal planning, preparation, and delivery, particularly those with higher cognitive levels. This was true across all levels in the agency and consistent with prior research. Recommendations for further study include studying similar agencies in different regions and whether providing staff with additional knowledge about meal planning makes a difference in meals provided to IID. Social change can be implemented by using the information from the study to develop a preliminary intervention plan to accommodate the needs of IID and assist staff in developing nutritious meals.

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## Dedication

This book is dedicated to my two beautiful children who sacrificed a lot of mommy time. They both kept encouraging me to keep going.

## Table of Contents

List of Tables .....	v
Chapter 1: Introduction to the Study.....	1
Introduction.....	1
Background and Problem Statement.....	2
Dietary Patterns.....	2
Effects of Diet on Health .....	2
Possible Contributing Factors to Dietary Intake.....	4
Residential Agencies.....	7
The Gaps to Be Addressed in This Study.....	8
Purpose of the Study .....	9
Research Question .....	10
Theoretical Foundation .....	10
Nature of the Study.....	13
Operational Definitions.....	14
Assumptions of the Study .....	15
Scope and Delimitations .....	16
Limitations .....	17
Significance of the Study .....	18
Summary.....	18
Chapter 2: Literature Review.....	20
Introduction.....	20

Search of Literature.....	22
Theory of Planned Behavior.....	22
Literature Review.....	24
Individuals with an Intellectual Disability.....	24
Effects of Diet on Overall Health.....	26
Mental Health and Diet.....	30
Description of the residential protocol for responsibilities.....	32
Possible factors related to the implementation of a healthy diet.....	34
Summary.....	42
Chapter 3: Research Method.....	44
Introduction.....	44
Research Design and Rationale.....	45
Research Question.....	45
Role of the Researcher.....	46
Methodology.....	47
Participant Selection Logic with Ethical Considerations.....	47
Summary.....	51
Chapter 4: Results.....	52
Introduction.....	52
Research Question.....	53
Setting for Study.....	53
Background of Agency.....	53



Agency Mission .....	55
Demographics .....	55
Data Collection .....	57
Setting Up Data Analysis.....	57
Step One.....	57
Step Two .....	59
Step Three .....	59
Step Four.....	64
Step Five .....	65
Step Six .....	65
Step Seven.....	65
Data Analysis .....	68
Within-Case Analysis .....	68
Across-Case Analysis .....	131
Summary.....	140
Chapter 5: Discussion, Conclusions, and Recommendations.....	143
Introduction.....	143
Interpretation of the Findings.....	144
Limitations of the Study.....	150
Recommendations.....	150
Agency Setting.....	151
Job Responsibility.....	151

Knowledge .....	151
Cognitive Level of IID .....	152
DHS Standards and Regulations .....	152
Recommendations for Practice .....	152
Evidence of Trustworthiness.....	153
Credibility .....	153
Transferability.....	154
Confirmability.....	154
Conclusion .....	154
References.....	156
Appendix A: Interview Protocol.....	166
Appendix B: Letter of Cooperation .....	168
Appendix C: Flyer.....	169
Appendix D: Screening Tool .....	170
Appendix E: Contact Letter .....	171
Appendix F: Data Spreadsheet Example .....	173
Appendix G: Example of Participant’s Direct Quotes.....	174
Appendix H: DHS Guidelines .....	175

## List of Tables

Table 1 Background of Participants, CILA, and Clients Served .....	56
Table 2 Within-Case Analysis .....	58
Table 3 Across-Case Analysis .....	59
Table 4 Example of Coding Process.....	61
Table 5 DSP Themes .....	70
Table 6 Supervisor Themes .....	91
Table 7 Administrator Themes .....	109
Table 8 Across-Case Analysis .....	132
Table 9 Themes Represented Across Cases.....	134
Table 10 Comparison of findings from literature and Shelton Study.....	146
Table 11 Findings Within TPB Framework.....	149

## Chapter 1: Introduction to the Study

### **Introduction**

Implementing a healthy diet is a crucial aspect to improving physical and mental health (Crocker, 2010). For individuals with an intellectual disability (IID) it is even more important because this population has a great struggle with healthy eating due to their cognitive impairments and impulsivity (Maaskant, van Knijff-Raeven, van Schrojenstein, & Veenstra, 2009). Little is known about how dietary decisions are made for this population, specifically the influences that govern the decisions that are made on a daily basis regarding the food this group is served. Since food that people consume affects their entire well-being this population is at risk if they do not eat a proper balanced diet (Maaskant et al., 2009). The present study examined the influences that guide the decisions of staff responsible for implementing the diet for IID. By understanding what influences the diet that is provided for IID modifications to the diet can be made and diet interventions for this population can be designed.

This chapter will give a brief review of the literature examined for the basis of the study including the types of diet, how diet affects health, the residential setting that IID live in, and six factors that have been demonstrated to contribute to diet implementation. In addition to the literature background this chapter will also explain the problem statement, purpose of the study, the research question, the theoretical framework, the nature of the study, definitions, assumptions, scope and delimitations, limitations, and significance.

## **Background and Problem Statement**

### **Dietary Patterns**

There are two types of dietary patterns discussed throughout the literature that serve as the foundation for food that is consumed by individuals the Mediterranean and the Western style diet (Freeman, 2010; Jacka et al., 2010; Sanchez-Villegas et al., 2011). Both of these dietary patterns can have a negative or positive effect on the body. The Mediterranean diet is considered the healthy diet and consists of a diet high in vegetables, fruits, legumes, whole grains, fish, olive oil, and low-fat dairy products and is found to decrease depressive symptoms (Freeman, 2010). The Western style diet, in contrast, is considered the unhealthy diet and consists of the consumption of large amounts of processed foods (Freeman, 2010), refined sugar (Jacka & Berk, 2007), and saturated and trans-unsaturated fats (Sanchez-Villegas et al., 2011). In addition, a Western-style diet has also been linked to a low intake of fruit, vegetables, and fiber (Jacka & Berk, 2007).

### **Effects of Diet on Health**

The food people consume, known as diet, has a major impact on the physical and mental well-being of IID (Crocker, 2010). Consumption of a Western style diet negatively affects physical health and often leads to obesity (Freeman, 2010). It has been related to several health conditions such as hypertension, diabetes, heart disease, arthritis, stroke, and respiratory diseases, among others (Bell & Bhate, 1992; Bhaumik, Watson, Thorp, Tyrer, & McGrother, 2008; Ito, 2006; Maaskant et al., 2009; Rimmer & Yamaki, 2006). Sohler and colleagues (2009) stated that 43% of IID are within the obese range, suggesting they more than likely have an unhealthy diet.

Diet also has been associated with mental health (Crocker, 2010; Freeman, 2010). Dog (2010) discussed how the nutrients of a Mediterranean diet support mental health by decreasing depressive symptoms, irritability, anxiety, and psychiatric symptoms. Dog also explained that a Western style diet lacks the necessary nutrients and, as a result, has been associated with an increase in mental health related problems such as depression, anxiety, manic mood, poor concentration, and an increase in psychiatric symptoms. This is a significant issue considering over 50% of IID are diagnosed with a severe mental illness or behavioral problem (Bhaumik et al., 2008).

The empirical evidence previously noted has illustrated the effects that diet can play in the physical and mental health of an IID. Research has shown that IID living in a residential agency are more likely to eat an unhealthy diet compared to those in the general population (Maaskant et al., 2009). An unhealthy diet has been related to increased obesity and other physical health risks (Bell & Bhate, 1992; Bhaumik et al., 2008; Ito, 2006; Maaskant et al., 2009; Rimmer & Yamaki, 2006) as well as negatively affecting psychiatric symptoms (Freeman, 2010 & Sanchez-Villegas et al., 2011).

Bell and Bhate (1992) conducted a study of 183 IID living in the community with varying levels of intellectual disability from profound to mild. In the study, the body mass index was calculated according to gender and compared with the general population. The results of the study showed that obesity is more prevalent among IID than the general population. The authors stated that further research should be completed since this study was a small sample and did not examine reasons behind the obesity among this group.

The research conducted by Bhaumik et al. (2008) showed a link between diet and health risks but successful management interventions have primarily been related to the general population. Bhaumik et al. suggested that further studies be done among the intellectually disabled population and those who care for IID should be included in the studies to find the most successful and appropriate intervention to reduce obesity.

Ito (2006) found that IID have a greater risk of obesity and other health risks when moving to a residential agency if nutritional training and physical activity do not accompany the move. Ito suggested that more clinical investigations be conducted to establish an intervention that can prevent these increased risks. Maaskant et al. (2009) also suggested that more research be done with IID that includes food in-take, weight status, and health control programs; it is crucial that dietary habits be included in the studies to provide results that will lead to effective modified interventions.

Rimmer and Yamaki (2006) suggested that further research needs to include factors associated with obesity among IID to successfully modify the environment to positively impact the health of IID. Though there are factors that have been linked to obesity, studies have not included them to successfully modify the environment. There needs to be more specific research on the IID population considering that there are factors that differ from the general population such as the lack of control on their food selection (Rimmer & Yamaki, 2006).

### **Possible Contributing Factors to Dietary Intake**

There are many possible factors that can contribute to the dietary intake for IID living in a residential agency including attitude of personnel, resources, Department of

Human Services (DHS) standards and regulations, rights and freedom of IID, use of energy-dense food as a reward, and knowledge of what a healthy diet entails (Escalante-Guerrero, De la Roca-Chiapas, & Macias-Cervantes, 2012; Illingsworth, Moore, & McGillivray, 2003; Reynolds, Zupanick, & Dombeck, 2011; Rimmer & Yamaki, 2006; Schroder, Marrugat, & Covas, 2006; Zarcone, Iwata, Rodgers, & Vollmer, 1993).

Though these factors have been shown to contribute to general dietary intake they have not all been specific to IID living in a residential agency.

A correlation between attitude and food habits was found through a quantitative study conducted by Escalante-Guerrero et al. (2012). The study concluded that the individuals who moved from the precontemplation stage to the action stage were more likely to maintain healthy food habits. However, this study focused on elementary age children, not IID.

The cost of a diet program has been shown to be a contributing factor for dietary intake. A quantitative study by Schroder and colleagues (2006) was conducted to understand the cost difference between low and high adherence to the Mediterranean diet. Two dietary indices were utilized including the Mediterranean Diet Score and the Healthy Eating Index. Dietary intake was assessed through the use of a food frequency questionnaire. The average prices of food items were calculated. An adjusted linear regression analysis was conducted and showed that it is more expensive to adhere to the Mediterranean diet than to an unhealthy diet. This study showed that a Mediterranean diet was more expensive which could be a factor contributing to the dietary intake of IID in a residential agency (Schroder et al., 2006). Although the studies by Escalante-Guerrero et



al. (2012) and Schroder et al. did not focus on IID, they, like others, looked at factors contributing to dietary intake and point to issues that can affect implementation of a diet for healthy living.

The Illinois DHS set standards and regulations, found in the Joint Committee of Administrative Rule 115, which must be followed by agencies providing services for IID (2012). Zarcone et al. (1993) conducted a direct observation study to assess if the services that are provided to IID meet the standards and regulations required by state and federal law. Their sample consisted of two residential facilities in two regions of the United States with Facility A servicing 1,050 residents and Facility B servicing 900 residents. Observation was completed on three different occasions during different time periods. During the observations, there was no interaction between the observer and the residents or staff. There were four categories that the observers assessed including quality of living environment, conditions of the clients, client behavior, and staff behavior. A momentary time-sampling procedure was utilized to collect data. The results showed that living and client conditions were highly scored whereas client and staff behavior showed greater variability. This study showed that there are some aspects of the services provided for IID that do not always meet the state standards; however, diet implementation was not specifically examined. Though diet was not examined, this study does show that even if the state sets a standard it is still the responsibility of the agency to implement it (Zarcone, 1993).

A review of literature by Reynolds, Zupanick, and Dombeck (2011) explained that applied behavioral analysis (ABA) consists of providing rewards for good choices,

receiving no reward for bad choices, and receiving negative consequences for dangerous behaviors that harm self or others to teach appropriate behaviors for IID. The authors' analysis showed how the use of ABA, even with the use of food as the reward, is beneficial in modifying behaviors. However, there is a lack of research among IID and how the use of food as a reward may be related to an increase in consumption of energy dense food. Having food as a reward initiates several negative consequences including contributing to poor health and eating habits, encouraging overconsumption of unhealthy foods, and increasing preference for sweets and other energy-dense foods (USDA, 2004). The USDA (2004) suggested that alternatives to food rewards would be beneficial in providing a healthy environment.

Knowledge and understanding of what a nutritious diet entails is essential in determining one's dietary intake (Escalante-Guerrero et al., 2012). Escalante-Guerrero et al. (2012) showed that a lack of understanding led to unknowingly consuming unhealthy dietary foods. Illingsworth et al. (2003) included IID specifically with the understanding of how knowledge impacts dietary intake. They conducted a study to create a Nutritional and Activity Knowledge Scale specific for IID. This scale can be used in further research among this population even with the lower cognitive ability due to its validity and easy to administer components.

### **Residential Agencies**

A major factor in the diet that is implemented for IID is the residential agency in which they live. Agencies have staff on site to implement services that teach IID how to

live as independently as possible. Agency staff manage the diet that is provided to IID (Maaskant et al., 2009).

Policy and procedures for each agency set the standards for the responsibilities of each staff member. DHS (2012) explains in their Joint Committee of Administrative Rule 115.320 there are different levels of staff that make up the governing body of an agency.

There are three levels of staff within a residential agency that can influence the diet served to IID: administrators, supervisors, and direct support professionals (DSP) (DHS, 2012). Each of these three levels plays a different yet vital role in the diet consumed by IID. The *administrators* are responsible for creating, writing, and implementing the policies and procedures for a residential agency (DHS, 2012). Though standards are set by the state, it is the administration's responsibility to include the state standards into the agency policy and procedures. *Supervisors* are responsible for managing the DSP and for enforcing the programs and policies that have been put into place by the agency (DHS, 2012). *DSPs* are responsible for the actual implementation of the diet served (DHS, 2012). They are the persons responsible for the grocery shopping as well as the ones who prepare the food for IID.

### **The Gaps to Be Addressed in This Study**

As previously noted, research has demonstrated the potential consequences of a poor diet on the mental and physical health of IID. Understanding the intersection between how dietary decisions are made and the role of staff in diet implementation is crucial for the design of interventions.

This study addressed several gaps in the literature pertaining to the

implementation of a healthy diet among IID in a residential setting:

- Bhaumik et al.'s (2008) suggestion to include those that care for IID in further research.
- Factors that are specific to IID in a residential agency such as their lack of control over their food intake as proposed by Rimmer and Yamaki (2006),
- The dietary intake of IID which was suggested to be further researched by both Ito (2006) and Maaskant et al. (2009).

Understanding staffs' decision making regarding the diet implemented addresses these gaps in the literature. It includes those that care for IID as suggested by Bhaumik et al. (2008), it includes a specific factor related to IID in a residential agency such as a staff controlling the diet as suggested by Rimmer and Yamaki (2006), and it is specific to dietary intake of IID as proposed by Ito and Maaskant et al. (2009). Thus, understanding these influences has the potential for influencing policy and practice in how diets are implemented for IID (Maaskant et al., 2009). A more thorough examination of the literature regarding the relationship between diet and IID is found in Chapter 2.

### **Purpose of the Study**

The purpose of the present qualitative case study was to address the gaps identified by Bhaumik et al. (2008), Rimmer and Yamaki (2006), and Maaskant et al. (2009), specifically the influences that guide staff decisions about the diet they provide to IID in a residential agency. This phenomenon of interest is important because once the influences are better understood an effective intervention plan can be implemented.

### **Research Question**

RQ: How do staff members make decisions about the diet they provide for an individual with an intellectual disability?

### **Theoretical Foundation**

The present study was based on the theory of planned behavior (TPB) which proposes that behavior is determined by intentions that are a result of three influences—one's attitude, subjective norms, and perceived behavior control (Ajzen & Fishbein, 1980). For a behavior to be achieved it is dependent on the intention (motivation) as well as the control (ability) one has over the behavior. Ajzen and Fishbein (1980) explain that in TPB there are six constructs that represent the behavioral control.

- Attitude: This is the way one thinks or feels about the behavior.
- Behavioral intention: The motivation behind the behavior, the more willing they are to perform the behavior the more likely the behavior will be performed.
- Subjective norms: If the behavior is considered to be accepted by peers and people of importance then the behavior is more likely to be performed.
- Social norms: Whether the behavior is considered accepted or required in a group setting.
- Perceived power: This refers to the variables that could affect the performance of the behavior.
- Perceived behavior control: The perception of how the person feels they can perform the behavior, either with ease or difficulty.

TPB has been shown to be a constructive framework to predict healthy behavior (Povey, Conner, Sparks, James, & Shepherd, 2000; Sheeran, Connor, & Norman, 2001), to develop instruments that measure dietary intentions (Cruwys, Platow, Rieger, & Byrne, 2013; Mark, Riley, McDonnell, Pipe & Reid, 2014), as well as to predict the intentions of those that care for IID to encourage healthy diet for IID (Jenkins & McKenzie, 2011).

TPB has been shown to be a successful framework for understanding dietary behaviors without needing to include other factors (Povey et al., 2000). Povey et al. (2000) conducted a study that examined the effects that social influences had on healthy dietary behaviors using TPB constructs of subjective norms and perceived behavior control. They also added descriptive norms and perceived social support to determine if either should be included as influences in dietary behaviors. The results of their study showed that TPB is a successful framework for understanding dietary behaviors with neither descriptive norms or perceived social support contributing more than the TPB variables. They did, however, suggest that perceived social support be considered for TPB due to the results showing it to be a moderator between perceived behavior control and intentions. Sheeran et al. (2001) studied TPB as a predictor for the adoption and maintenance of new health behaviors, specifically health screenings. They evaluated patients who never received a health screening, two times, over a 13-month period. The results showed that behavioral intentions and perceived behavioral control were significant predictors of screening as well as the frequency of screening. This study did find a limitation to TPB. Though individuals would participate in the health screening, it

could not decipher which participants would be consistent or which would delay their participation. Researchers suggest adding implementation intention and process of change to TPB to be able to better assess patterns of change (Sheeran et al, 2001). Further research is required to make such a change. Both studies have shown that TPB is useful in predicting healthy behaviors.

Cruwys et al. (2013) conducted a study to evaluate the psychometric properties of the Dieting Intentions Scale (DIS). The purpose of the DIS is to predict future behavioral efforts to lose weight (Cruwys et al., 2013). The DIS was designed using the TPB construct of intentions to determine future dietary behaviors. Through four studies conducted using the DIS, it was found that the DIS is a reliable and valid tool to assess an individual's intention for dietary behavior (Cruwys et al. 2013). Mark et al. (2014) used TPB to develop an instrument that assessed the influences on dietary behavior for individuals with chronic heart disease (CHD). The instrument developed was called The Healthy Eating Opinion Survey and was found to be a reliable and valid tool that measured behavioral beliefs, normative beliefs, control beliefs, and behavioral intentions (Mark et al., 2014). The information gathered from the instrument can be used to develop interventions to improve dietary patterns for individuals with CHD. One limitation to the instrument was that it is only valid for participants with CHD and further testing must be completed before the instrument can be used with other populations (Mark et al., 2014). However, both studies have shown that TPB is useful in developing instruments to measure dietary intentions.

Jenkins and McKenzie (2011) utilized TPB to examine the intentions that individuals who care for IID have in encouraging healthy eating behavior for the IID they serve. The results showed that a variable of TPB, attitude, was significant in determining the intentions of caregivers. It was also suggested that this study is the basis for developing an intervention for healthy dietary behavior among IID by focusing on a positive attitude with the caregivers for this population. However further studies are proposed.

In the present study, TPB was used as to frame the interview questions and as a coding guideline during data analysis. The interview questions were developed to cover the three influential intentions described in TPB. For example, by asking the question about the ways staff is able to incorporate beliefs about what is important in the meals that are served to clients can determine if the TPB influence of perceived behavior control is a factor when determining the diet for IID. The influential intentions were also the framework for data analysis; the responses to the questions were categorized into one of the three intentions from TPB.

### **Nature of the Study**

This study utilized a qualitative case study approach. A case study, as proposed by Yin (2014), has a twofold definition that encompasses the scope of a case study and its features. The scope of a case study approach is to investigate a phenomenon in depth within its real-world context (Yin, 2014). A case study features the need for multiple sources of evidence and would benefit from theoretical propositions to guide data collection and analysis (Yin, 2014). The present study met the definition for a case study.



The purpose of the present study was to examine in depth the phenomenon of how decisions are made regarding the diet implemented in a residential agency for IID by examining three levels of staff: administrators, supervisors, and direct support staff.

The data were collected through interviews in a 1- month period. The sample consisted of 12 staff members at a residential agency that serves IID. Four staff members from each of three levels of staff who make decisions regarding the diet of IID were interviewed. The TPB informed the development of the interview questions and was used in the analyses of data. Data collection and analysis are described in detail in Chapter 3.

### **Operational Definitions**

*Attitude:* Interest and desire to change and provide a healthy diet (Escalante-Guerrero et al., 2012).

*Energy-Dense Foods:* Foods low in nutritional value and high in caloric intake (Center for Disease Control, n.d.).

*Individuals with an Intellectual Disability (IID):* According to DHS (2012) an individual is considered to be IID if he has an intelligence quotient (IQ) of 70 or below. In addition to a low IQ, individuals who have a chronic and severe related condition that affects intellectual functioning, such as epilepsy or cerebral palsy, can also be considered IID if their disability results in difficulties in at least three areas of daily living (DHS, 2012).

*IID's Rights and Freedom of Choice:* The ability for IID to make their own choices, including the choice of what diet they consume (Rimmer & Yamaki, 2006).

*Mediterranean Diet / Healthy Diet:* consists of a diet high in vegetables, fruits, legumes, whole grains, fish, olive oil, and low-fat dairy products (Freeman, 2010).

*Nutritional Knowledge:* An understanding of food nutrition such as protein, carbohydrates, calcium, salt, sugar, and fat content (Illingsworth et al., 2003).

*Perceived Behavior Control:* A control-related influence that suggests that intentions are persuaded by one's understanding of how much control one has over a behavior (Ajzen and Fishbein, 1980).

*Residential Agencies:* Provide services for IID of all four levels of ID, mild through profound (Neely-Barnes, Marcenko, & Weber, 2008). Residential agencies strive for normalization among the IID giving IID a homelike environment, a chance to be in the community, self-determination, and choices. Levinson (2005) explained that the residential setting is focused on rights and autonomy.

*Subjective Norm:* Social influence that suggests that the expectations of others play a role in influencing intentions (Ajzen & Fishbein, 1980).

*Western Style Diet / Unhealthy Diet:* large amounts of processed foods (Freeman, 2010), refined sugar (Jacka & Berk, 2007), and replacing polyunsaturated and monounsaturated fatty acids with saturated fats and trans-unsaturated fats (Sanchez et al., 2012).

### **Assumptions of the Study**

Four assumptions governed the study:

- The responses given by the participants would reflect their honest descriptions of the influences that guided their decisions in the diet they served for IID.

- The responses of the participant would support a consistent set of themes.
- Six factors identified by Escalante-Guerrero et al., 2012 (attitude), Schroder, Marrugat, and Covas, 2006 (resources), Zarccone et al., 2006 (standards and regulations imposed by DHS), Rimmer and Yamaki, 2006 (IID's rights and freedom of choice), Reynolds, Zupanick, and Dombeck, 2011 (use of energy-dense food as a reward), and Bhaumik et al., 2008 (knowledge of what a healthy diet entails) would play a role in each of the participant's implementation of a healthy diet for the IID under their care.
- I would understand the participants' responses and analyze the data with accuracy.

### **Scope and Delimitations**

The present qualitative study sought to understand the perspective of staff that work with IID regarding the influences that guided their decisions about the diet they provided for IID in a residential agency. There were three main aspects to the present study: (a) focus is on the staff who care for IID in a residential agency because of the vital role they play in the daily care of IID including diet (DHS, 2012); (b) the population is IID in a residential agency as there is an increased risk of gaining weight when IID move into a residential agency as well as the serious health-related risks caused by weight (Maaskant et al. 2009), and (c) the interest in the diet implemented among IID in a residential agency is based on the impact diet has on the overall health of an IID and because it has been shown that a Mediterranean diet is most beneficial yet lacking among this population (Crocker, 2010; Henderson et al., 2008; Rimmer & Yamaki, 2006).

The data were obtained in a 1-month period through face to face interviews with three levels of staff who work with IID including administrators, supervisors, and DSPs. The present study included staff from one agency in the Midwest. The transferability of the results from this study to encompass all agencies for IID is small since no two agencies are alike. However, the present study established a foundation for all agencies to examine the influence on diet implementation.

### **Limitations**

The participants of the study were limited to staff in one agency in the Midwest. It is not known if what was found in this study would apply to different agencies in different regions of the US. The use of a qualitative interview study can incur possible researcher bias which could affect the responses from the participants. To minimize this, bracketing was used where I identified my personal biases, perceptions, beliefs, and opinions prior to developing the interview questions, and reviewed them prior to each interview. In addition, the coordinator of the health psychology program at Walden University vetted the interview questions. Bracketing was also used during the analysis of the data to make sure my beliefs did not influence the analysis.

Participants in different roles may not articulate and perceive information at the same level. To accommodate differences among participants, the interview protocol was tailored to each group; depending on the responses to interview questions some groups were asked additional questions (Appendix A). The interview questions were practiced with a heterogeneous group of a few individuals to identify any issues. The coordinator

of the health psychology program at Walden University also evaluated the questions to determine if they can answer the RQ.

### **Significance of the Study**

The present study extends the current body of literature in regard to understanding what influences the decisions of individuals responsible for providing the diet for IID in residential facilities and addressed the gaps identified in the research literature on this population. The present study expounds on the current literature that already explains the vital role that those who work with IID have in implementing a healthy diet among IID. The results of the present study promote positive social change because they can contribute to a change in the way that diet is implemented among IID living in a residential agency and lead to effective modified dietary interventions.

The literature has shown a healthy diet to be beneficial for IID (Henderson et al., 2008); therefore, understanding what influences those who play a significant role in providing that diet can lead us closer to implementing a healthy diet for IID who live in a residential facility. Researchers such as Maaskant et al. (2009) stated that further research was needed to better understand the dietary intake among IID in order that effective healthy dietary interventions could be developed and implemented.

### **Summary**

There is research on the importance of a healthy diet among IID and the effect a healthy diet has on physical and mental health; however, there has been little research on the staffs' roles and influence in diet implementation. The present study addressed this gap in the research. Interviews were conducted with three levels of staff who work with

IID including administrators, supervisors, and DSP to assess their roles in diet planning, food preparation, and implementation of meals. The TPB provided the framework for establishing interview questions and analyzing the data.

Chapter 2 provides a comprehensive literature review that addresses the IID population, the effect that diet has on IID including physical and mental health, the residential agency's protocol for roles and responsibilities, and the six factors that influence the implementation of a healthy diet.

## Chapter 2: Literature Review

### **Introduction**

Approximately 3% of individuals in the U.S. have an intellectual disability (Matson, Neal, & Kozlowski, 2012), many of whom require extensive monitoring and guidance into adulthood to become as independent as possible which may lead them to a residential agency for the intellectually disabled. The agency in which IID live, and its staff, determine their quality of life because the social interaction they have with those who work with them play a vital role in their overall well-being (DHS, 2012, Module 1 DSP Notebook).

One aspect of an IID's life that staff have an influence over is their diet (Maaskant et al., 2009). Diet is a vital component to an IID's life due to the impact it has on physical and mental health (Crocker, 2010). Diet is linked to obesity, which is a concern with IID since 43% of IID are within the obese range (Sohler et al., 2009). Several studies suggested that obesity is more prevalent among IID than among the general public (Henderson et al., 2008; Maaskant et al., 2009; Rimmer & Yamaki, 2006; Sohler et al., 2009). Henderson et al. (2008) suggested that future research should evaluate the reasons why physicians make different recommendations for diet and exercise with IID compared to the general populations. Possible reasons to consider include the physician's perspectives about the potential success of interventions, who has control over the diet, staffing resources, and scheduling restraints. Maaskant et al. (2009) stated that further research in health control programs, weight status, food in-take, and physical exercise is important to quantify the contributions of dietary habits, physical inactivity, and other

risk factors. These contributions are needed to develop an effective and efficient intervention. Rimmer and Yamaki (2006) suggested that further research needs to include factors associated with obesity among IID to successfully modify the environment to positively impact the health of IID. There needs to be more specific research on the IID population considering that there are factors that differ from the general population such as the lack of control of their food selection. Sohler et al. (2009) suggested that further studies should include more detailed clinical information, should examine whether IID are at a greater risk of developing chronic heart disease at a younger age than the general population, and should test if early treatment reduces the risk of premature mortality from chronic heart disease among IID.

The present study focused on diet among IID living in a residential agency group home; specifically, how staff members make decisions about the diet they provide for IID. The purpose of the present study was to understand the influences that guide the staff's decision regarding the diet they provide to IID in a residential agency. This purpose included those that care for IID (Bhaumik et al., 2008), factors that are specific to IID such as their lack of control over their food intake (Rimmer & Yamaki, 2006), and the dietary intake of IID (Ito, 2006; Maaskant et al., 2009). Understanding these influences may contribute to making changes in how diets are implemented for IID (Maaskant et al., 2009).

This chapter will explain the literature search strategy, how the TPB was used, and an extensive literature review encompassing IID, diet, relationship of diet to health, the six factors that contribute to diet implementation, and the three levels of staff that



work with IID.

### **Search of Literature**

A thorough search of the literature encompassed using the Walden University library database, primarily under the psychology and health sections. Current studies were reviewed including dissertations. Main keywords used to search for articles in the database included *intellectual disability, obesity, nutrition, policy, attitude, rewards, freedom of choice, rights, and health*. In addition to the Walden University Library database, the DHS website was examined to gain information regarding standards and regulations for residential agencies regarding diet and nutrition. Finally, the DHS DSP training guide was referenced to understand the IID population and certain roles expected of those who work with IID especially in regard to implementing a healthy diet.

### **Theory of Planned Behavior**

In the TPB Ajzen and Fishbein (1980) proposed that behaviors can be predicted by one's intentions. Ajzen and Fishbein explained that intentions to engage in a behavior can be determined upon three factors attitude, subjective norm, and perceived behavioral control. Attitude is a personal influence that encompasses one's belief about the importance of such a behavior. Subjective norm is a social influence that suggests that the expectations of others play a role in influencing intentions. Perceived behavior control is a control-related influence that suggests that intentions are persuaded by one's understanding of how much control they have over a behavior (Ajzen & Fishbein, 1980). These three factors lead to the intentions for a person to engage in a behavior.

TPB has been applied to many behaviors, especially healthy behaviors such as diet; it has been shown to be a beneficial theoretical framework in predicting healthy eating intentions and behaviors (Povey et al., 2000). Jenkins and McKenzie (2011) took TPB to another level and found that TPB is a useful theoretical framework in predicting the intentions of IID's staff in encouraging a healthy diet for those they support. Jenkins and McKenzie completed a quantitative study that examined the TPB and the effect it has on staff who care for IID and the diet that is provided. The study consisted of 112 participants who cared for IID. The instrument that was utilized for this study was the TPB questionnaire which had good validity and reliability with a Cronbach  $\alpha$  of 0.96 for measuring attitude. Jenkins and McKenzie found that the attitude of others towards healthy eating is an influential factor in the staff's own attitude toward implementing a healthy diet among IID. Those that impact the staff's attitude include IID, the family of IID, as well as other staff and management (Jenkins & McKenzie, 2011). Jenkins and McKenzie found that the majority of staff, 83%, has positive intentions to encourage healthy diet implementation among IID; however, there is still high prevalence of obesity among IID. This inconsistency may be due to several factors including (a) self-reports generally overestimate actual behavior, (b) the study had a nonrepresentative sample, and (c) other factors influence weight such as autonomy and living situations. This study leads into the present study with the understanding of what factors the staff members perceive to be hindering the implementation of a healthy diet. Jenkins and McKenzie noted that staff members have good intentions about healthy diet implementation but

could not explain why there is still such a high rate of obesity among IID. The present study utilized TPB to gain an understanding of this phenomenon.

The six factors represented in the present study encompass the three influences of intention found in TPB. The attitude of the staff and the knowledge of a healthy diet can be included in the attitude, or personal influence on the intention to eat and encourage IID to eat a healthy diet. The use of food as a reward and DHS standards and regulations can be characterized under the subjective norm influence of TPB. Finally, IID's rights and freedom of choice, along with the available resources, can be included in the perceived behavior control influence. Therefore, TPB was a useful framework to utilize for the present study.

## **Literature Review**

### **Individuals with an Intellectual Disability**

According to the Illinois DHS, DPS's training manual (2012, p.9), an individual is considered to be IID if he or she has an IQ of 70 or below. In addition to a low IQ, the DHS training module explained that individuals who have a chronic and severe related condition that affects intellectual functioning, such as epilepsy or cerebral palsy, can also be considered IID as long as their disability results in difficulties in at least three of the following areas of daily living:

- Self-care (taking care of their basic needs).
- Language (communicating with others).
- Learning (ability to learn new things).
- Mobility (getting from place to place).

- Self-direction (motivating and guiding themselves through daily living activities).
- Capacity for independent living (living independently including ability to earn enough money to live on).

The DHS manual (2012) explained that there are different levels of intellectual disabilities including mild, moderate, severe, and profound. Individuals within the mild level have an IQ between 50 to 70; approximately 85% of IID are diagnosed in the mild range (DHS, 2012). Individuals in the mild range struggle substantially with two areas of adaptive behaviors; they do however have the ability learn, take care of their grooming needs, and can even hold a job (DHS, 2012). Individuals within the moderate level have an IQ between 35-55 and struggle with several areas of adaptive behaviors (DHS, 2012). Approximately 10% of IID are diagnosed in the moderate range (DHS, 2012). Individuals in the moderate range have the ability to learn working skills, self-care, and other activities of daily living; however, they cannot achieve complete independence. Individuals within the severe level have an IQ between 20-40 and struggle significantly in all areas of adaptive behavior. Approximately 3%-4% of IID are diagnosed in the severe range (DHS, 2012). Individuals in the severe range have very limited ability to accomplish daily living skills on their own. Their communication is limited but their understanding is better than their speaking ability (DHS, 2012). It is very common for individuals in the severe range to also have medical issues such as a seizure disorder (DHS, 2012). Individuals within the profound level have an IQ between 0 and 25 and have major limitations in all areas of adaptive behavior (DHS, 2012). Approximately 1%-2% of IID are diagnosed in the profound range (DHS, 2012). Individuals in the profound

range need a lot of assistance for completing everyday activities such as dressing and eating. It is also common for physical and health conditions to coincide with the profound diagnosis.

The present study focused on IID who live in a residential agency. These agencies provide services for IID of all four levels, mild through profound (Neely-Barnes, Marcenko, & Weber, 2008). There are more than 9,000 residential agencies for the IID in the United States (IBIS World, 2012). There were no available data on the number of IID residents per group home. The use of residential agencies began with the deinstitutionalization movement, which was the process of moving IID out of institutions and into the community (DHS, 2012). This process strived for normalization among the IID giving IID a homelike environment, a chance to be in the community, self-determination, and choices. Levinson (2005) explained that the residential setting is focused on rights and autonomy. The authority that is placed on the staff is not to override the autonomy and rights of the IID, rather it is to be used to shape and teach the IID to enhance their ability for autonomy. Although IID's behaviors and preferences may impact the staff's decisions in providing certain dietary items, it is the staff's responsibility to train and model healthy dietary examples to prepare the IID for independent living (Maaskant et al., 2009 & Rimmer & Yamaki, 2006). Understanding the importance of a healthy diet is necessary for independent living due to the major impact that diet has on overall health.

### **Effects of Diet on Overall Health**

Both physical and mental health is affected by diet (Crocker, 2010). This makes

diet a crucial element in providing quality care for IID. It is more difficult to establish a healthy diet among IID in comparison to the general public. This occurs because IID generally do not have control over their food preparation or serving size (Maaskant et al., 2009). Their cognitive impairments and interest or attachment to the texture and taste of certain foods may also lead to selecting only calorie-rich food at each meal (Maaskant et al., 2009).

One physical health factor related to diet is obesity, which in turn results in further physical ailments. Melville et al. (2008) and Bhaumik et al. (2008) conducted quantitative studies to determine the prevalence of obesity among IID in comparison to the general population. Melville and colleagues studied 945 IID living in the Scotland community 16 years of age and older. In this study the body mass index (BMI), demographic characteristics, socioeconomic deprivation, level of intellectual disability, and various health parameters were measured to determine the prevalence of obesity as well as examine the factors that are associated with obesity. The results of the study showed being overweight and obese to be more prevalent among IID (39.3% women & 27.8% men) compared with the general population (25.1% women & 22.7% men) (citation). BMI was significantly greater for women with an intellectual disability resulting in women being more prone to being overweight or obese. A regression analysis showed that the risk of being overweight or obese was reduced when the level of functioning was lower (i.e. severe and profound). Melville et al. (2008) concluded that more research needs to be conducted to further understand the reasons for the increased prevalence of overweightness and obesity among IID.

Bhaumik and colleagues (2008) conducted a study of 1,119 participants with an intellectual disability, 661 men and 458 women aged 20 years and older; 74% were under 50 years of age and 59% lived in a residential setting. A cross-sectional analysis of data was used to compare the general population with IID. The information was obtained from a register that was comprised of information gathered from interviews and questionnaires. Logistic-regression was used to determine what factors contribute to overweightness and obesity. The results showed obesity to be more prevalent with independent living or living with family, the ability to feed and drink independently, among females, hypertension, Down syndrome, and the absence of cerebral palsy. Underweightness was shown to be more prevalent among younger ages, those not taking medication, and the absence of Down syndrome. Obesity in women and underweightness in both men and women is more prevalent among IID compared with the general population (Bhaumik et al., 2008). Bhaumik et al. suggested that further studies be done among the intellectually disabled population and those who care for IID should be included in the studies to find the most successful and appropriate intervention.

Physical health conditions that result from poor diet and consequent obesity include hypertension, diabetes, heart disease, arthritis, stroke, and respiratory diseases, among others (Bell & Bhate, 1992; Bhaumik et al., 2008; Ito, 2006; Maaskant et al., 2009; Rimmer & Yamaki, 2006). Henderson et al. (2008) and Sohler et al. (2009) added that many of these health conditions can lead to CHD which is the leading cause of morbidity and mortality in the United States and a rising concern for IID due to the increased life expectancy of IID. Healthy dietary habits are the best form of prevention

for all these conditions (Henderson et al., 2008).

Mental health is another aspect of a person's life that is affected by diet. Over 50% of IID are diagnosed with a severe mental illness or behavioral problem (Bhaumik et al., 2008). Diet plays an important role in the proper development and maintenance of one's mental health (Crocker, 2010; Freeman, 2010). Some mental illnesses and behavioral problems that are affected by diet include depression (Fafouti et al., 2002; Behzadi, Omrani, Chalian, Asadi, & Ghadiri, 2009; Soh, Walter, Baur, & Collins, 2009), hyperactivity (Curtis & Patel, 2008), and psychosis (Amani, 2007; Hedelin et al., 2010; Hibbeln et al, 2003; Kinney et al, 2009).

There are two types of diets that can affect physical and mental health, Mediterranean and Western style diets (Jacka et al., 2010; Sanchez-Villegas et al., 2011; Freeman, 2010). A Mediterranean diet consists of a diet high in vegetables, fruits, legumes, whole grains, fish, olive oil, and low-fat dairy products and is found to decrease depressive symptoms (Freeman, 2010). In contrast, the Western-style diet consists of the consumption of large amounts of processed foods (Freeman, 2010), refined sugar (Jacka & Berk, 2007), and saturated and trans-unsaturated fats (Sanchez-Villegas et al., 2011). In addition, a Western-style diet has also been linked to a low intake of fruit, vegetables, and fiber (Jacka & Berk, 2007).

Adherence to a Mediterranean diet has been shown to significantly decrease physical and mental health risks as well as decrease obesity (Hadziabdic, Boiikov, Pavic, & Romic, 2012). Hadziabdic and colleagues completed a meta-analysis of current literature regarding the Mediterranean diet and found that consumption of a



Mediterranean diet significantly decreases the risk of overall mortality, cardiovascular disease, cancer, Parkinson's, and Alzheimer's disease. They have suggested that further research include larger long-term randomized trials including a variety of factors that could contribute to the interaction between the Mediterranean diet and health risks. Sanchez et al. (2012) conducted a study that consisted of 11,015 participants. A 136 - food item questionnaire was used to measure adherence to a Mediterranean diet and SF-36 Health Survey was used to determine one's health-related quality of life. A multivariate-adjusted model was used and found a significant direct link between consumption of a Mediterranean diet and all physical and most mental health domains. These quantitative studies have shown that diet is a crucial factor regarding physical health and mental health. This is an essential element to consider when working with IID given that IID are prone to physical ailments (Rimmer & Yamaki, 2006) and that 50% are dually diagnosed with a mental illness (Bhaumik et al., 2008).

The physical and mental health of IID would benefit from a Mediterranean-style diet because of the vital role that nutrition plays in the development and maintenance of both physical and mental health (Crocker, 2010; Freeman, 2010). Providing a healthy diet for IID will benefit their overall quality of life due to the decrease of mental and physical ailments. Just as diet impacts health, research has also shown that mental health influences diet.

### **Mental Health and Diet**

The effect that mental health has on diet is important to understand for the present study since about 50% of IID are diagnosed with a mental illness (Bhaumik et al., 2008).

Mental illness is a factor in dietary consumption for reasons such as lack of energy, decreased awareness, general lack of attention to self-care, and inability to self-control food intake (Knolle-Veentjer, Huth, Ferstl, Aldenhoff, & Hinze-Selch, 2006).

Throughout the literature it is evident that individuals with a mental illness have poor dietary behaviors (Graham, Griffiths, Tillotson, & Rollings, 2013; Van Citters et al., 2010). Van Citters and colleagues conducted a quantitative study of 76 participants with a median age of 43.5 and a wide range of mental illnesses. The purpose of this study was to utilize an individualized, community-integrated, health promotion program to enhance healthy lifestyle behaviors in individuals with a mental illness. The program included a weekly meeting with a health mentor, free access to a fitness facility, group motivation, incentive program, fitness plan including dietary goals, education, and an individualized assessment. A mixed effects linear modeling with unstructured covariance was used to compare differences over time with physical activity, dietary behaviors, health indicators, and psychological functioning and symptoms. The results showed that participation in the program increased exercise, decreased waist circumference, increased satisfaction with personal fitness, and improved mental health and negative symptoms (Van Citters et al., 2010). The Van Citters et al. study did not focus on IID and the participants were responsible for their own meals. However, this study did contribute to the relationship between mental health and diet.

Several studies have shown a correlation between increased caloric and dietary fat intake and decreased fruit, vegetable, and fiber intake among individuals with mental illness conditions such as schizophrenia, bipolar disorder, and depression (Amani, 2007;

Aschbrenner, Mueser, Bartels, & Pratt, 2013; Henderson et al., 2006). Psychotropic medication is a common form of treatment for mental illness and is another factor that negatively affects diet (Henderson et al., 2006; Merriman, Haw, Kirk, & Stubbs, 2005).

Approximately one out of every four IID display challenging behaviors that result in the use of psychotropic medication (Oliver-Africano, Murphy, & Tyrer, 2009). About 30% to 50% of all psychotropic medication prescribed to IID are anti-psychotics (Scheifes, Stolker, Egberts, Nijman, & Heerdink, 2010; Tsiouris, 2010). Anti-psychotic medications have two side effects related to diet, fatigue and weight gain. Fatigue enhances a lack of motivation that becomes a challenge in modifying diet (Aschbrenner et al., 2013). Weight gain is caused due to the increased hunger that is brought upon by the medication; this weight caused by medication further compounds the obesity problems and highlights the need for healthy diets in a residential agency for this population (Aschbrenner et al., 2013). The residential agency is organized to provide the best care for IID which should include healthy diet expectations. The present study focused on healthy diet implementation via the perception of the staff of IID in residential agencies.

### **Description of the residential protocol for responsibilities**

Residential agencies are homes for IID who need a structured environment and close monitoring. These agencies also provide services that teach IID how to live as independently as possible. The services that are provided by residential agencies are regulated by outside factors as well as inside factors. The outside factors include state and federal laws and guidelines, court decisions, and standards from DHS (Zarcone et al.,

1993).

The inside factors are those who work more directly with this population, the agency staff. These individuals can provide a well -balanced diet even when it is not a requirement. There are primarily three levels of staff that work directly with IID; they include administrators, supervisors, and DSPs (DHS, 2012). Each level of staff plays a vital role in implementing a healthy diet for IID. The administrators are the ones responsible for creating, writing, and implementing the policies and procedures for the residential agency. The supervisors play a more vital role in making sure that the policies and procedures are followed and implemented correctly by the DSP. It is the supervisor's responsibility to manage the DSP and to enforce the programs and policies that have been put into place by the administrators. The DSP are responsible for the most direct care for the residents in the agency. It is their responsibility to implement tasks that are required of the IID such as basic care. They also must make sure Independent Service Plan goals (a requirement from the state) are completed and must be available to intervene when maladaptive behaviors occur. It is the DSP's responsibility to train IID to be as independent as possible. DSPs have the most stressful job in the agency and have less personal achievement goals which can lead to neglecting implementation of programming, therefore, their direct supervisors play a crucial role (Sturmey & Stiles, 1996). Below is a diagram that illustrates the different levels of staff and their responsibilities in the care of IID and providing a healthy diet.



Each level of staff plays a different, yet vital role in the care of IID. The present study interviewed individuals in each of the three specific roles to determine what factors influence the diet provided for IID in a residential setting for IID.

### **Possible factors related to the implementation of a healthy diet**

Using quantitative studies, researchers have identified factors that contribute to the diet that is implemented among IID. Six major factors have been linked to the implementation of a healthy diet program in the residential setting for IID include a) attitude (Escalante-Guerrero et al., 2012), b) resources (Schroder, Marrugat, & Covas, 2006), c) standards and regulations imposed by DHS (Zarcone et al., 1993), d) IID's rights and freedom of choice (Rimmer & Yamaki, 2006), e) use of energy-dense food as a reward (Reynolds, Zupanick, & Dombeck, 2011), and f) knowledge of what a healthy diet entails (Bhaumik et al., 2008). The present study assessed these factors and how they influence the implementation of a healthy diet in residential agencies for IID. The focus of the study was on the staff and not the IID since it is the staff's responsibility to provide

good quality of life for the IID. Furthermore, because IID have low cognitive ability and frequently take psychotropic medications, they would be likely to make poor dietary choices if left to choose. Below each of the six major factors are reviewed.

**Staff attitude toward healthy eating.** One factor that could contribute to the lack of enforcement for healthy diet implementation among IID is the attitude of staff toward healthy eating. There is a strong positive correlation between attitude and various behaviors such as diet and exercise (Connor, Rhodes, Morris, McEachan, & Lawton, 2011). Although knowledge and education are important and key to adequate nutritional intake, they are not enough; attitude and habits are important too (Escalante-Guerrero et al., 2012). Escalante-Guerrero et al. (2012) conducted a quantitative study that surveyed 48 Mexican children from a private elementary school regarding food habits and physical activity. An instrument was created that focused on knowledge, attitude, and behavior. The results of the study showed that there is a correlation between attitude and food habits. The participants who were in the early stages of attitude change had never acted before in changing their diet whereas those who were in the later stages of attitude change had greater quantity and frequency of fruit consumption and water intake. Escalante-Guerrero and colleagues concluded that it is important to modify several behaviors at once instead of just focusing on one to effectively manage weight. However, this was a small- scale study and should be conducted on a larger scale as well as with different samples such as adults, IID, and other nationalities.

To implement positive behavior change, such as healthy lifestyle choices, not only is it important that the staff have a positive attitude toward the change, but they must also

believe that the change is important, possible, and beneficial (Collins, Logan, & Neighbors, 2012).

Oreg and Berson (2011) surveyed 75 Israeli School systems to determine if the leader's personal attributes and transformational leadership behaviors were connected to the employee's resistance to change. Seventy-five principals were surveyed on their personal values, demographics, and dispositional resistance to change. There were also 586 teachers who were asked to rate their disposition resistance to change and their behavioral intention to change. Oreg and Berson concluded that once the leader has a positive attitude toward a healthy diet change then implementation will follow by others; in other words, once the administrators have a positive attitude then the supervisors will follow which will then lead the DSP to follow. Oreg and Berson suggested that further studies should include cross-cultural samples, direct correlations between the leader's characteristics, specifically charismatic qualities, to employee's attitude, and understanding employee's reaction to change during different stages. The present study examined the views of the staff of how attitude toward implementation of a healthy diet contributes to their decision in the diet they provide for IID.

**Resources to provide healthy meals.** Economic concerns play a major role in the consumption of a healthy diet such as the Mediterranean diet because healthy dietary patterns cost more than low quality diets such as the Western style diet (Schroder, Marrugat, & Covas, 2006; Morris, Hulme, Clarke, Edwards, & Cade, 2014). A quantitative study by Schroder and colleagues consisted of 1,547 men and 1,615 women from Spain. The purpose of this study was to understand the cost difference between low

and high adherence to the Mediterranean diet. Two dietary indices were utilized including the Mediterranean Diet Score and the Healthy Eating Index. Dietary intake was assessed using a food frequency questionnaire. The average prices of food items were calculated. An adjusted linear regression analysis was used and showed that adherence to the Mediterranean diet led to greater monetary cost. A multiple linear regression analysis showed that BMI and obesity are related to diet. Schroder, Marrugat, and Covas suggested that the effect of monetary costs should be further explored with a broader sample size including other nationalities and socioeconomic statuses.

The majority of IID are living in poverty. These individuals typically don't work because of their limited intellectual ability or their problematic behaviors, the difficulty they have finding work, and the low wages for those who are employed (Mirfin-Veitch, 2003 & Rimmer and Yamaki, 2006). The IID who live in a residential agency have a greater chance of being unemployed causing them to rely on state benefits as their primary source of income, which is used to pay for their residential accommodations. The low-income of this population is a risk factor for poor nutritional intake as their income is what funds the facility (Bhaumik et al. 2008 & Rimmer and Yamaki, 2006). Schroder and colleagues (2006) explained that trying to promote a diet full of healthy and more expensive items can be difficult for low-income individuals. Due to the link between low income and poor nutritional diet, this factor was examined in this study as a possible hindrance for implementing a healthy diet. The present study examined the views of the staff on how the financial cost of a healthy diet contributes to their decision in the diet they provide for IID.



**DHS Standards/Regulations.** The DHS guides the policy and services provided for IID in a residential agency (Zarcone et al., 1993). Zarcone and colleagues conducted a direct observation study to assess if the services that are provided to IID meet the standards and regulations required by state and federal law. Their sample consisted of two residential facilities in two regions of the United States with Facility A servicing 1050 residents and Facility B servicing 900 residents. Observation was completed on three different occasions during different time periods. During the observations, there was no interaction between the observer and the residents or staff. There were four categories that the observers assessed including quality of living environment, conditions of the clients, client behavior, and staff behavior. A momentary time-sampling procedure was utilized to collect data. The results showed that living and client conditions were highly scored whereas client and staff behavior showed greater variability. The procedure used in this study could be replicated by agency supervisors to monitor for changes needed across time (Zarcone, 1993).

From reviewing the standards set in place by DHS (2012) it must be noted that the quality of food is not mentioned; the only standard required from DHS regarding diet and nutrition is to provide three meals a day; there are no nutritional requirements. Even though DHS does not make healthy diet a requirement, residential agencies can still provide one knowing that it is in the best interest of IID. The present study examined the staff's view whether making it a requirement from DHS would make it easier to provide a healthy diet or whether other factors are more prominent.

**IID's Rights/choice.** One of the primary, as well as most difficult, issues IID

service providers have is giving the population they serve independence in making their own choices, including those involved with food consumption (Rimmer & Yamaki, 2006). IID residing in a group home, especially those from mild to moderate levels of disability, typically make unhealthy food choices (Ito, 2006 & Maaskant et al., 2009). Ito conducted a study of 526 participants who have been diagnosed with an intellectual disability (342 men, 184 women). The participants were 18 years or older and those with Prader Willie and Down's syndrome were excluded from the study. The participants were classified by age, gender, and residential placement. Five obesity related health problems were examined including hyperglycemia, dyslipidemia, hypertension, liver disease, and hyperuricemia. A chi-square analysis was used and resulted in a higher prevalence of obesity found in older women living in community group homes. Ito suggested that the higher prevalence of obesity can be attributed to the freedom that those with higher levels of functioning have to live as they like which may lead to less physical activity and poor dietary choices. Maaskant et al. found through their literature review that IID are more prone in choosing calorie-rich foods due to their lack of impulse control. Ito suggested that more clinical investigations be conducted to establish an intervention that can prevent these increased risks. Maaskant et al. suggested that further research in health control programs, weight status, food in-take, and physical exercise be examined in order to develop an effective and efficient intervention.

The responsibility of providing independent living usually takes precedence over the responsibility of providing healthy eating habits (Rimmer & Yamaki, 2006). A balance between autonomy and adequate support needs to be established to better serve

this population; IID must be encouraged to make healthy choices (Maaskant et al., 2009 & Rimmer & Yamaki, 2006). Though the ultimate decision may be the IID's, it is still the responsibility of the staff to educate and teach them in the decision that is best for their health (DHS, 2012). The present study examined the views of the staff on how the client's choice guides the decision of the diet that is implemented.

**Use of energy-dense foods as rewards for good behavior.** It is extremely common for IID to have behavioral problems (Bhaumik et al., 2008). One way to alter these behaviors is to use food as a reward for good behavior (Reynolds, Zupanick, & Dombeck, 2011). The connection that food has with dopamine activity makes it useful for redirecting behaviors (Brown, McCutcheon, Cone, Ragozzino, & Roitman, 2011). Reynolds and colleagues explained that a reward must be concrete and immediate which makes using food an easy and effective tool. Appelhans and colleagues (2011) explained that more palatable foods, which are typically unhealthy items, tend to be a better reward choice. According to the study conducted by Appelhans et al. the impulsivity of IID contributes to the sensitivity of palatable food rewards. In this study Appelhans and colleagues examined the interaction between food reward sensitivity and inhibitory control among 62 overweight and obese women within the age of 18 years to 45 years. This study utilized a linear regression model and found that sensitivity to palatable food rewards drives overeating only when accompanied by insufficient inhibitory control. The use of food as a reward has been used among IID because it has been shown to help in altering behaviors. Brown et al. conducted a study on male Sprague-Dawley rats which showed that the use of food as a reward contributes to phasic changes in dopamine

activity which plays a critical role in learning and goal-directed behaviors. Further studies are necessary to establish a more concrete relationship between food and dopamine activity distribution. These studies show that food can be used to help manage behavioral problems but with the lack of control that IID display using such techniques can lead to overeating and eventually obesity.

Having food as a reward initiates several negative consequences including contributing to poor health and eating habits, encouraging overconsumption of unhealthy foods, and increasing preference for sweets and other energy-dense foods (USDA, 2004). The USDA suggested that alternatives to food rewards would be beneficial in providing a healthy environment.

**Knowledge of a healthy diet.** An understanding of food nutrition such as protein, carbohydrates, calcium, salt, sugar and fat content is necessary to make healthy dietary decisions (Illingsworth, Moore, McGillivray, 2003; Pettigrew, Jongenelis, Moore, & Pratt, 2015). Illingsworth et al. conducted a study to create a Nutritional and Activity Knowledge Scale for IID because their review of the literature found that for change to occur in the diet that is implemented there needs to be an understanding of what is known about what nutritious eating entails. They included a sample of IID with different levels of disability such as mild, moderate, and severe to validate their scale. The results showed that the Nutritional and Activity Knowledge Scale is a valid and easy to administer scale that can be used in further research focused on developing interventions to improve the overall health of IID (Illingsworth et al., 2003).

Many of the individuals who care for IID have a limited understanding of healthy

dietary habits due to a lack of education and support (Bhaumik et al., 2008). Successful management interventions have primarily been related to the general population, Bhaumik et al. suggested that further studies be done among the intellectually disabled population and those who care for IID should be included in the studies to find the most successful and appropriate intervention. The present study examined the staffs' understanding on how knowledge, or lack thereof, influences their role in the diet that is provided for IID in a residential agency.

### **Summary**

Research has suggested that a nutritious diet is important to implement among IID due to the consequences that are related to their dietary intake. The research has also shown many possible factors that can contribute to the lack of implementation of a healthy diet. However, few studies have shown the factors that can hinder the implementation of such a healthy diet. According to the current literature more research needs to be completed to find an effective and appropriate intervention for providing a healthy diet among IID in a residential setting. A consensus from the literature states that further studies need to include the IID population specifically. In addition, it has been noted that further studies should include those that care for IID (Bhaumik et al., 2008) and be geared toward understanding specific variables that are associated with diet as well as the factors that can be modified to improve diet (Freeman, 2010). The present study incorporated these suggestions and examined the influences that guide the staff's decisions in the diet that is provided for the IID under their care. A qualitative case study was the most appropriate approach for this study due to the in- depth focus on the process

of how staff make the decision of the diet that is implemented. A thorough explanation of the methodology is found in Chapter 3. This study was important because once the influences have been identified then modifications can be done to provide a healthy diet for IID.

## Chapter 3: Research Method

### Introduction

Researchers have shown that IID are more likely to have unhealthy diets, exposing them to major health risk factors affecting their overall well-being (Crocker, 2010; Freeman, 2010; Maaskant et al., 2009). With about 43% of IID being in the obese range (Sohler et al., 2009) and over 50% of IID having a mental health diagnosis (Bhaumik et al., 2008), it is imperative that diet be thoroughly examined, specifically the influences leading to the decision of the diet that is implemented. Approximately 3% of individuals in the U.S. have an intellectual disability (Matson et al., 2012). Many of these individuals require extensive monitoring and guidance into adulthood to become as independent as possible; this may lead them to a residential agency for the intellectually disabled. Research has not addressed dietary factors specifically for IID within a residential setting.

Six possible factors have been identified that can affect the implementation of a healthy diet for IID living in a residential facility: (a) staff's attitude toward healthy eating, (b) resources needed to provide a healthy diet, (c) DHS standards and regulations, (d) IID's rights and freedom of choice, (e) use of food as a reward for behavior, and (f) knowledge of what a healthy diet entails.

The purpose of this qualitative case study was to explore the influences that guide staff's decisions about the diet they provide to IID in a residential agency. Understanding staff's decision making regarding the diet they implement is important information that will add to current research and has the potential to influence changes in how diets are

implemented for IID (Maaskant et al., 2009). For the present study, a healthy diet was defined as the consumption of a Mediterranean Diet (Crocker, 2010; Freeman, 2010).

This chapter describes the qualitative method of research that was used in this study including a description of the research design, justification of the research strategy, role of the researcher, methodology, the questions examined, data analysis, and ethical considerations necessary for this study.

## **Research Design and Rationale**

### **Research Question**

RQ: How do staff members make decisions about the diet they provide for an individual with an intellectual disability?

For the present study, I explored how the staff members described the influences that guided their decisions in the diet they provided for IID. A case study design was utilized with individual interviews with each participant. A case study design was the most appropriate design for this study because it met the criteria for a case study as proposed by Yin (2014) and did not meet the criteria for other designs. A case study is used when the study is exploring a process in depth. This study focused on the process of staff's decision making in implementing a healthy diet for IID.

Creswell (2009) explained different research designs that could be used for a qualitative study as well as the criteria needed to meet the standards of each design. According to the descriptions of each design, a case study design was most appropriate to address the research question. This study was not appropriate for an ethnography design because it did not focus on a certain cultural group and was not conducted over a long



period of time. The grounded theory design was not appropriate for this study because a theory was not sought after nor was a process, action, or interaction evaluated. A narrative approach was not beneficial since the lives of the participants were not studied. The phenomenological design was also not an appropriate design for this study because the participants' experiences regarding the phenomenon were not in question.

### **Role of the Researcher**

I had many different responsibilities in the preparation of this study. I identified the problem through an extensive search of the literature. Once the problem was identified, I reviewed different research strategies and determined that a case study would be the most appropriate strategy to use. Based on the problem that needed further study I developed a research question (RQ) as well as interview questions that would answer the RQ. I then developed the methods I would use to analyze my data. I selected a community partner where I recruited my participants and developed a letter of cooperation (see Appendix B) and recruitment materials (see Appendix C). At the completion of the study, I shared my findings with the participants and the community partner.

Due to my extensive work with this population in this specific setting, I carried personal opinions, beliefs, assumptions and biases. There are two biases that, as the researcher, I identified that needed to be addressed. First, I had my own opinion as to what I believed the answer to the research question would be. This bias could have affected the development of the interview questions. The coordinator of the health psychology program at Walden University reviewed my RQ and the interview questions

to ensure there were no leading questions. This bias could also taint my analysis of the meaning behind the responses of the participants. I addressed this bias by analyzing only the data that were presented through my study and disregarded all preconceived notions I had regarding the topic. My chair reviewed my analyses to ensure that I did not insert or infuse the analysis with my personal beliefs. I also employed Lincoln and Guba's (1985) evaluative criteria for establishing the trustworthiness of my study. The second bias that needed to be addressed for the present study was that I have a clear understanding about the roles that each level of staff plays in the care of IID. To address this bias, I conducted the study at a residential facility that I have not been affiliated with and did not assume that the responsibilities within each role were the same across agencies.

## **Methodology**

### **Participant Selection Logic with Ethical Considerations**

**Sample.** For this study participants included three levels of staff who worked with IID in a residential agency in the Midwest. Recruitment took place at one agency and all participation in the study was voluntary. I interviewed 12 participants, four from each staff level—administrators, supervisors, and DSP.

**Sampling strategy.** Maximum variation sampling strategy was utilized for this study by including participants from all staff levels. According to Patton (1990), this strategy is key in finding the root of experiences when there is a diversity of participants that can affect the phenomenon in question.

**Sample size.** The sample consisted of 12 participants to gain a thorough saturation of the data as suggested by Guest, Bunce, and Johnson (2006). Four

individuals from each staff level; administrators, supervisors, and DSP were recruited. Even though the sample is not homogeneous, an attribute Guest et al. (2006) identified as contributing to data and thematic saturation with an  $N$  of 12, participants within each group were expected to share similar beliefs and experiences and thus achieve data and thematic saturation.

**Criteria for participation in the study.** The criteria that the participants needed to meet included (a) work at a residential facility for IID as either an administrator, supervisor, or DSP; (b) have worked in this setting for a minimum of 6 months; this criterion was necessary since it takes about three to six months to adjust to a new job (Green, 2013); and (c) be involved in the dietary decisions for IID. All prospective participants were screened and met the criteria for participation.

**Recruitment of participants.** To obtain access to participants I sent a contact letter to the vice president of adult residential and clinical services of an agency that serves IID in the Midwest asking if the agency would be interested in partnering with me for the study (see Appendix E). In the letter, I introduced myself and described the study and how I would like the agency to be involved. The contact letter was accompanied with a sample flyer. The flyers included a brief description of the study, the criteria for participation, and how interested staff members can contact me to express interest in participation (see Appendix C). I also indicated that I would follow- up with a phone call or if interested meet in person with the vice president. After the vice president expressed interest in being a community partner, I sent the letter of cooperation that was needed to be signed (see Appendix B).

Once the letter of cooperation was received and IRB approval number 11-01-16-0187275 was obtained, I posted flyers at the agency announcing the study. When a staff member contacted me to express interest I conducted the screening to make sure that the person was eligible to participate and then I conducted the interview. The interview was not conducted during work hours. At the time of the interview I presented the consent form and had the participant complete it and answer any questions the participant had about the study. The informed consent form included a background of the study, how participants were selected, what the responsibilities of the participants would entail, the confidential nature of the study, the voluntary nature of the study, sample interview questions, and any ethical concerns related to the study. A \$20 Visa gift card was given to participants as a token of appreciation for participating in the study.

**Instrumentation and Materials.** The interview sessions were conducted in person at a CILA that is serviced by the community partner. Each session was recorded for reliable data processing. The questions for participants were designed to answer the research question. To accommodate differences among participants, the interview protocol was tailored to each group. Depending on the responses to interview questions some groups were asked additional questions. The purpose for the different types of questions was to understand how staff members make decisions and how their roles within the agency govern the nature of the decisions they make.

The TPB was used to develop the interview questions. Specifically, the three influences that determine the intentions as proposed by TBP—attitude, subjective norm, and perceived behavior control—were used to inform the development of the questions at

each staff level. Ajzen and Fishbein (1980) have defined the three influences as follows.

*Attitude (A)* is a personal influence that encompasses one's belief about the importance of such a behavior; it was the primary focus of questions in group three. *Subjective norm (SN)* is a social influence that suggests that the expectations of others play a role in influencing intentions; it was the primary focus for questions 1b, 2a, and 2c. *Perceived behavior control (PBC)* is a control-related influence that suggests intentions are persuaded by one's understanding of how much control they have over a behavior; it was the primary focus for questions 1c, 3b, 3c, and 4b.

Because the focus of specific interview questions included elements of the theory, TPB was also present in the responses to the interview questions. The research question and interview questions are found in Appendix A. Prompts were not separate questions, they were used to trigger or cue an area discussed and used only if the information was not provided during the interview.

**Data collection and analysis.** The data for the present study was collected through face to face interviews which were recorded and transcribed. I transcribed the interview data. The strategy used to analyze the data entailed working the data from the ground up. I reviewed the data looking for key themes to uncover patterns, insights, and concepts that lead to a greater understanding of the phenomenon being studied. For this study, each level of staff constituted a case. A within- case analysis was conducted along with an across-case analysis to determine the similarities and disjuncture in comparison of each case.

Yin (2014) has identified different data analysis methods. Pattern-matching was also used to analyze the data. As the data from the present study were obtained and coded it was matched with the data from previous research studies to determine the validity of the findings and to discover any new influences that contributed to the decision of the diet served for IID. The data from this study built on previous research.

Using the TPB as a template, the patterns of data from the current study were matched with the findings from other studies. Validating data on contributions to the decisions made for implementing a diet among IID can contribute to the implementation of an effective modified intervention plan for providing a healthy diet. All findings from the present study are presented in Chapter 4.

No qualitative analysis software was used in this analysis.

### **Summary**

A case study qualitative approach was used to gain an understanding of participants' perceptions of the factors that influenced their decisions about the diet they provided for IID. Interviews were conducted using the TPB as a guide. Data were analyzed using a within-case analysis and across-case analysis methodology. The results and findings from the analysis are presented and discussed in Chapter 4.

## Chapter 4: Results

### **Introduction**

Implementing a healthy diet is a crucial aspect to improving physical and mental health (Crocker, 2010). For IID it is even more important because this population has a great struggle with healthy eating due to their cognitive impairments and impulsivity (Maaskant et al., 2009). Researchers have found that IID are more likely to have unhealthy diets, exposing them to major health risk factors affecting their overall wellbeing (Crocker, 2010; Freeman, 2010; Maaskant et al., 2009). With about 43% of IID being in the obese range (Sohler et al., 2009) and over 50% of IID having a mental health diagnosis (Bhaumik et al., 2008), researchers (Ito, 2006 & Maaskant et al., 2009) have stated that it is imperative that the diet for this group of individuals be thoroughly examined.

The purpose of this qualitative case study was to explore how staff members make decisions about the diet they provide for an individual with an IID in a residential agency. Understanding staffs' decision making regarding the diet implemented addresses several gaps in the literature: those that care for IID as suggested by Bhaumik et al. (2008), a specific factor related to IID in a residential agency such as a staff controlling the diet as suggested by Rimmer and Yamaki (2006), and specific to dietary intake of IID as proposed by Ito (2006) and Maaskant et al. (2009). Thus, understanding the decision making process has the potential for influencing policy and practice in how diets are implemented for IID (Maaskant et al., 2009).

**Research Question**

RQ: How do staff members make decisions about the diet they provide for an individual with an intellectual disability?

This chapter describes how the study was conducted and covers the setting in which the interviews took place, the demographics of the participants, and how the data were collected and analyzed. The chapter presents the results of the study and concludes with a summary and description of Chapter 5.

**Setting for Study**

The information regarding the IID agency was obtained from the agency's website, which will remain confidential for the privacy of the agency and participants.

**Background of Agency**

The IID agency where I gathered the data for this study began informally in 1949 by a group of parents who noticed the need of education for children with developmental disabilities. These parents began a day program in a church basement. In 1976, the IID agency became incorporated in its present form. Currently, the IID agency provides many services for children and adults with disabilities. For this study, only the staff members from the adult residential services were interviewed.

The IID agency provides 24-hour care for adults with disabilities in single family homes. The agency is located in a major city in the Midwest. These homes, which provide a family living environment, are called community integrate living arrangements (CILAs). The CILAs may be a shared living arrangement staffed by adult foster care parents or they may be a shift-staffed home. A shift-staffed home is where the staff are



divided by shifts, such as first shift (9am to 4pm), second shift (3pm to 11pm), and third shift (11pm to 9am). Each of the shared living arrangement CILAs are comprised of two to four adults with disabilities, and the shift-staffed homes can have up to eight residents. The IID agency currently serves 270 adults with disabilities with 70 CILA group homes in 25 communities. Each group home must abide by the following criteria:

- Homes are licensed by DHS.
- Homes are staffed by professionally trained staff.
- Each person receives individualized program facilitation and case management.
- Individuals learn community living skills in a supportive environment.
- Home staff receive continuing professional training including specific training for autism spectrum disorders.
- Daily living responsibilities are carried out by each individual based on their capabilities encouraging as much independence as possible.
- Staff provide the appropriate amount of support in all areas of daily living including; cooking, housekeeping, budgeting, and other skill areas that are suitable for the individual.
- Staff support is available 24-hours a day as needed by the individual.

IID living in a CILA are also provided case management and various supports to enable individuals who live independently in the community. Some of the additional supports include assistance in budgeting, grocery shopping, home management, and medical appointments. Below is the mission statement from the IID agency (a few alterations were made to maintain confidentiality).

**Agency Mission**

The IID agency operates with a mission statement that focuses on the belief “that all people have the right to achieve their full potential, despite their differences, and be independent in society.” With this belief, the IID agency provides whatever support is needed (i.e., life skills training, assistive technology, vocational skills, and a place to call home) for the clients they serve to live as independent as possible.

At the time I collected data, there were not any major changes in the operation of the IID agency. All participants had been with the agency for over 1 year.

**Demographics**

Table 1 displays the background of the participants, the CILA in which they work, and information about the clients they serve. Pseudonyms have been given to participants to maintain their confidentiality.

Table 1

*Background of Participants, CILA, and Clients Served*

Participant and Level Within IID Agency	Number of Years Working with IID	CILA(s) Location <sup>a</sup>	Cognitive Level of Clients Served <sup>b</sup>
Sally, DSP <sup>c</sup> 1	13 years	Site <sup>d</sup> A	Mixed
Jane, DSP 2	3 years	Site B	Low w/ behavior
Ally, DSP 3	3 years	Site C	Mixed
Nicole, DSP 4	9 years	Site D	Mixed
Ben, Supervisor <sup>e</sup> 1	2 years	Site A Site E	Mixed Low
Cara, Supervisor 2	9 years	Site B Site C	Low w/ behavior Mixed
Eva, Supervisor 3	8 years	Site F Site G	Low Low
Faye, Supervisor 4	6 years	Site D Site H	Mixed Mixed
Dan, Administrator <sup>f</sup> 1	22 years	Site F Site G Site I Site J Site K Site L	Low Low Mixed Low Mixed High
Lisa, Administrator 2	20 years	Site M Site N Site O Site P Site Q Site R	High Low Mixed Low Low Low
Tina, Administrator 3	14 years	Site B Site C Site S Site T Site U Site V	Low w. behavior Mixed Low Mixed Low High
Irene, Administrator 4	11 years	Site D Site H Site W Site X Site Y Site Z	Mixed Mixed Mixed Mixed Mixed Low

<sup>a</sup> House Location is the CILA home in which the participant works <sup>b</sup> Cognitive Level is the severity of intellectual disability the clients served represent (i.e., mild, moderate, severe, profound) <sup>c</sup> Direct Support Professionals <sup>d</sup> Site with letter is the pseudonym name for the CILA <sup>e</sup> Supervisors are the direct overseer of the CILA, supervisors oversee two CILAs <sup>f</sup> Administrators are the broad overseers of the CILA; administrators oversee six CILAs

### **Data Collection**

Interviews were conducted with the 12 participants identified in Table 1. Each 25- to 45-minute interview (see Appendix A) took place in a private setting at one of the IID agency's CILAs. I recorded and transcribed each interview.

### **Setting Up Data Analysis**

The data analysis consisted of several steps that began after all interviews were transcribed. Unlike some qualitative research strategies that have a sequence of steps to be followed during data analysis (e.g., the seven-step Colazizi analysis method used in phenomenology; the four-step categorical-content analysis method used in narrative studies per Paule, L. by personal communication on February 21, 2017), case studies do not have an established series of steps to follow. As a result, Yin (2009) recommended that a “tentative outline can and should appear in a case study protocol” (p. 90). Yin further noted that because “case study reports do not have a uniformly acceptable outline each investigator must be concerned throughout the conduct of a case study with the design of the final case study report” (p. 90). Yin did recommend five analytic techniques and modified versions of two of them—pattern matching and cross case synthesis—were used in this study. Both a within-case analysis and an across-cross analysis and synthesis were conducted for this study. Prior to conducting the analysis, I prepared an outline of the steps to be taken to prepare for the analysis. They are presented below.

#### **Step One**

I decided at the onset of the study that I would conduct two levels of analysis: a within-case analysis and an across-case analysis and synthesis. The reason for this

decision was to determine if the level of staff led to different results as each level of staff have different educational backgrounds and different job descriptions and responsibilities. The within-case analysis and the across-case analysis and synthesis were treated as separate studies in the sense that data were analyzed for each separately. The across-case analysis and synthesis required aggregating findings across the two studies to note differences and similarities. This would enable me to see if there were unique outliers.

After the interviews were transcribed, I separated the interviews by case to prepare for the within-case analyses. A case was comprised of all participants who held the same staff level—DSPs, supervisors, and administrators. There were four participants in each case. Table 2 depicts the within-case analysis groups. Following the reporting of thematic information for each case is a summary of what was learned across themes for each case.

Table 2

*Within-Case Analysis*

Case	Participants
Direct Support Personnel	Sally, Jane, Ally, Nicole
Supervisors	Ben, Cara, Eva, Faye
Administrators	Dan, Lisa, Tina, Irene

The across-case analysis compared the summaries for each case with one another. The thematic summary for DSP was compared to the thematic summary of supervisors and

administrators. Following this was a synthesis of all of the data. Table 3 depicts the across-case analysis group.

Table 3

*Across-Case Analysis*

Cases
Direct Support Personnel (Sally, Jane, Ally, Nicole)
Supervisors (Ben, Cara, Eva, Faye)
Administrators (Dan, Lisa, Tina, Irene)

**Step Two**

Coding of the data began with a set of codes that came directly from the literature on diet implementation. The preset codes consisted of the six factors that contribute to diet implementation: (a) attitude (Escalante-Guerrero et al., 2012), (b) resources (Schroder, Marrugat, & Covas, 2006), (c) standards and regulations imposed by the DHS (Zarcone et al., 1993), (d) IID's rights and freedom of choice (Rimmer & Yamaki, 2006), (e) use of energy-dense food as a reward (Reynolds, Zupanick, & Dombeck, 2011), and (f) knowledge of what a healthy diet entails (Bhaumik et al., 2008)

**Step Three**

Using the six preset codes as a guide I began coding the DSP interviews. While examining the complete transcript for each participant, I asked myself a series of questions to determine which code I would apply to the data. The questions I asked included the following

- What is this saying?
- What does it represent?
- What is this an example of?
- What do I see is going on here?
- What is happening?
- What kind of events are at issue here?
- What is trying to be conveyed?

Table 4 presents a segment from an interview with Sally (Column 1), the questions I asked (Column 2), and the application of the preset codes (Column 3). I realized after analyzing the DSP data with the preset codes that the preset codes could not explain important segments of the interview data. As the segment illustrates, there was significant information regarding the decision making process being shared during the interview that addressed the RQ such as when decisions were being made and how they were decided. This led to the next iteration of the codes, specifically a new code (Decision Making About Food, DF) and subcodes (Who makes the decision, how the decision is made, when the decision is made, etc.). The table presents a sample of the second stage codes (Column 4) that emerged directly from the data. Below is the segment used to illustrate the iterations of coding that appear in Table 4:

I buy the food for the house. Um, also other staff bring, saying like if it is a holiday, we have a potluck, they all bring in something for a potluck on holidays. Clients mostly tell us what they want to eat. We have a client meeting every month and they always have food choices in the client meeting and so they always

tell us what they want. Because this is a more independent house, not a lower functioning, our clients buy their own food, they work so sometimes they come in and say “I’m not eating tonight, I have Burger King,” “I bought my own food” so that’s their rights so we can’t force them to eat dinner. We do have one that is autistic so he cannot talk so we do make sure he eats every night. He also has PICA so therefore he eats double portions just to try to fill him up. So, he doesn’t have any restriction, he only is allergic to grapefruit, so we try to give him a variety of everything cause he likes to eat so he gets a lot.

Table 4

*Example of Coding Process*

Transcript Segment	Questions I Asked	1 <sup>st</sup> Stage Codes	2 <sup>nd</sup> Stage Codes
Clients mostly tell us what they want to eat <sup>a</sup> . We have a client meeting every month <sup>b</sup> and they always have food choices in the client meeting <sup>c</sup> ; and so they always tell us what they want; because this is a more independent house not a lower functioning <sup>e</sup> our clients buy their own food	What is this saying? What does it represent? What is this an example of? What do I see going on here? What is happening? What is trying to be conveyed?	Clients Rights	Decision Making about food (DF) Subcodes <sup>a</sup> who makes decisions <sup>b</sup> when decisions are made <sup>c</sup> how decisions are made <sup>e</sup> functioning level
we do have one that is autistic so he cannot talk <sup>e</sup> so we do make sure he eats every night <sup>a</sup> . He also has PICA so therefore he eats double portions just to try to fill him up <sup>c</sup> . So, he doesn’t have any restriction he only is allergic to grapefruit so we try to give him a variety of everything cause he likes to eat so he gets a lot <sup>c</sup> .	What is this saying? What does it represent? What is this an example of? What do I see going on here? What is happening? What is trying to be conveyed?	Didn’t fall into any preset codes	Decision Making about food (DF) Subcodes <sup>a</sup> who makes decisions <sup>b</sup> when decisions are made <sup>c</sup> how decisions are made <sup>c</sup> reason <sup>e</sup> functioning level

The codes and their definitions were placed in a codebook I developed. I then used the 12 codes in my reanalysis of each transcript, starting with the analysis of the DSP data from all four cases. The definitions for each code were critical because they



grounded the analysis allowing me to return to the definitions if I felt I was starting to waver in the application of the codes. The 12 codes were as follows:

- **Decision making about food (DF).** This code included the information that was related to the way decisions were made regarding meal planning. Within this code there were five subcodes: (a) who is involved in the decision, (b) when are the decisions made, (c) how are the decisions made, (d) what are the mandatory food requirements, and (e) what is the reason for the decision that was made. When information pertaining to each subcode was combined the decision making process about food was explained.
- **Individualization of food decisions (IFD).** This code included the information that described how meals were planned on an individual basis. Not all meal preparations are one size fits all approach. There are some clients who have restrictions and all clients have different likes and dislikes.
- **Training regarding meal planning (TRM).** This code included the information that discussed the training that the staff received regarding meal preparation. Within this code there were six subcodes: (a) who required the training (DHS, agency, or participant), (b) what information was relayed, (c) what materials were given, (d) how often is the training given, (e) what is the reason for the training, and (f) the staff's desire for training.
- **Policy and implementation about food decisions (PIF).** This code included the information that focused on the policy and regulations that the agency has in place for implementing food decisions. Within this code there are four subcodes: (a) the

job description outlining the responsibility, (b) the reason for implementing such a policy, (c) what the policy is about, and (d) the supervision for follow through.

- **Money sources for food purchases (MS).** This code included the information that describes the money sources for purchasing food. Within this code there are three subcodes: (a) the type of source, ie. petty cash, Link, client funds; (b) allocation of sources, what was bought with the money from each source; and (c) the amount.
- **Information about each client (IC).** This code included the data that discussed the information that the staff receive about each client. Within this code there were two subcodes: (a) where the information is found and (b) the type of information that is given.
- **Use of information for planning meals (IPM).** This code included the data that corresponded with how the information about each client was used for planning meals. Within this code there were two subcodes: (a) how the staff obtained the information and (b) the reason why the staff used the information.
- **Preparation of food for meals per ISP (PM).** This code included the information that pertained to how the staff prepared the food for meals per the Individual Service Plan.
- **How clients communicate about food choices (CCF).** This code included the information that described the client's ability to communicate about food choices. Within this code there were three subcodes: (a) how the clients communicate, (b)

accommodations made for clients, and (c) differences among different cognitive levels of clients.

- **Teaching clients about healthy living (CHL).** This code included information that encompassed how the clients are taught about healthy living. Within this code there were four subcodes: (a) formal training, (b) informal training, (c) how often the training occurs, and (d) how the staff alter the clients' negative eating habits.
- **Beliefs about what you feel is a healthy meal for clients (BHM).** This code included information that is associated with the staff's personal beliefs about what is a healthy meal for the clients they serve. Within this code there were four subcodes: (a) specific items that the staff believe the client should or should not eat, (b) the portion size, (c) how food should be prepared, and (d) the clients' right to choose.
- **Use of snacks in the agency (US).** This code included information that pertained to the snacks that are given to the clients. Within this code there were three subcodes: (a) example of snacks, (b) the reason for the snack, and (c) the source of the snack.

#### **Step Four**

I used the codes identified in Step 3 with all DSP data. I then needed to determine if these new codes would be viable across cases so I then reviewed the four supervisor case transcripts using the same codes and subcodes I had used for the DSP case. The codes used for the DSP analysis were sturdy and could be used for the supervisor case.

**Step Five**

After the supervisor case transcripts were reviewed I then reviewed the four administrator case transcripts using the same method I used for the DSP and supervisor cases. This review found that the initial codes I developed could be used across the staff levels.

**Step Six**

After each case was reviewed I then went back to each transcript to double check the data and make sure that all data was correctly coded. I inserted the data in a spreadsheet sorted by codes in each column and participants in each row (see Appendix F).

**Step Seven**

After the 12 interviews were coded using the 12 codes and subcodes, the codes were then reviewed again for potential overlap. When one or more codes and their subcodes were similar a new iteration representing the combined codes was developed. The first set of codes where there was overlap were the codes *Preparation of Food for Meals per ISP* (PM) and *Use of Information for Planning Meals* (IPM). Both were combined and became a subcode of the code *Information About Each Client* (IC). All three codes—PM, IPM, and IC—had been about information on each client so one code was all that was needed.

The second change to the codes was to transfer the Individualization code (IFD) to a subcode of Decision Making About Food (DF) The third change was to remove code Policy and Implementation (PIF) about food decisions as the information was limited and

duplicated in code Decision Making About Food (DF) The final change to the codes was to transfer code How Clients Communicate About Food Choices (CCF) to a subcode of Decision Making About Food (DF). This final decision was made due to the duplication of data between the two codes.

The final set of codes was refined from 12 codes to 7 codes. The final code and subcode list is as follows

**Code 1: Decision Making About Food (DF)**

**1a** who is involved in decision (DFa)

**1b** when decisions are made (DFb)

**1c** how decisions are made (DFc)

**1d** food criteria (DFd)

**1e:** reason for decision (DFe)

**1f:** individualization (DFf)

**1g:** different levels (DFg)

**Code 2: Training Regarding meal planning (TRM)**

**2a:** Who (DHS or Agency) (TRMa)

**2b:** Information relayed (TRMb)

**2c:** materials given (TRMc)

**2d:** how often (TRMd)

**2e:** reason (TRMe)

**2f:** desire for training (TRMf)

**Code 3: Money Sources for food purchases (MS)**

**3a:** Type of source (MSa)

**3b:** Allocation of sources (MSb)

**3c:** amount (MSc)

**Code 4:** Information about each client (IC)

**4a:** Where information is found (ICa)

**4b:** Type of information (ICb)

**4c:** obtaining information (ICc)

**4d:** reason (ICd)

**Code 5:** Teaching clients about healthy living (CHL)

**5a:** Formal (CHLa)

**5b:** Informal/hands on (CHLb)

**5c:** How often (CHLc)

**5d:** Altering negative eating habits (CHLd)

**Code 6:** Beliefs about what you feel is a healthy meal for clients (BHM)

**6a:** Specific items (BHMa)

**6b:** Portion (BHMb)

**6c:** Preparation (BHMc)

**6d:** Client's right to choose (BHMd)

**Code 7:** Use of snacks in the agency (US)

**7a:** Example of snacks (USa)

**7b:** Reason for snack (USb)

**7c:** Source of snack (Bought on own, provided by agency) (USc)

Once development of the codes was complete and could be applied across the three cases the actual analysis of data commenced.

### **Data Analysis**

After all coding was completed for each case I began the within-case analysis. For each case I grouped the data by code and subcodes. The purpose of grouping the data was to identify patterns of responses across participants for each case. The patterns became themes.

During interviews with DSPs, supervisors, and administrators they would on occasion use the word *staff* when discussing a person or group of people at the IID agency who were involved in decision making about a particular issue. When the word *staff* is mentioned it can thus refer to any employee at the IID agency. Thus, when DSPs, supervisors, and administrators speak about staff they are referring to any staff that work in the agency (i.e. DSP, supervisor, or administrator) and not solely on their level.

### **Within-Case Analysis**

**Step 1.** To start the within-case analysis I used the data from staff members in the DSP case for the code Decision Making About Food (DF). I took the DSP data from the spreadsheet that I created and read through it all. As I read, I began to see patterns emerge from the data. These patterns were developed into themes. After the themes were developed I connected the data from each staff member in the case to summarize the meaning of the theme.

**Step 2.** After the DSP within-case analysis for code Decision Making About Food was complete I then followed the same procedure for the supervisor within-case analysis

as well as the administrator within-case analysis. The reason for analyzing the data by code and one case at a time was to keep the data organized and focused.

**Step 3.** I followed Steps 1 and 2 for all seven codes. The within-case themes for each code for DSP are in Table 5. The verbatim participant responses can be found in Appendix G.

**Direct support professionals.** Table 5 depicts the themes that emerged from the data per each code within the DSP case.



Table 5

*DSP Themes*

Code	DSP Themes
Decision Making for food (DF)	Theme 1: The staff will always plan a meal around the clients' likes and dislikes Theme 2: Each staff member has their idea what food the agency requires them to provide Subtheme 2a: There are standard requirements for clients with a general diet Subtheme 2b: Restrictions to diet play a vital role in planning meals
Training Regarding meal planning (TRM)	Theme 1: The staff are required to participate in a basic food handling training; specific nutrition training is required for houses that have residents with dietary restrictions.
Money Sources for food purchases (MS)	Theme 1: There are multiple sources of money for food purchases.
Information about each client (IC)	Theme 1: There are different ways in which dietary information is obtained. Theme 2: There are different documents that provide the staff with dietary information. Theme 3: When there is documentation about dietary needs they must be followed.
Teaching clients about healthy living (CHL)	Theme 1: The DSPs informally teach the clients they serve about healthy eating.
Beliefs about what you feel is a healthy meal for clients (BHM)	Theme 1: There are some common beliefs of the types of food that are healthy. Theme 2: DSPs believe portion is important to healthy eating.
Use of snacks in the agency (US)	Theme 1: There are a variety of snacks that are provided for the clients. Theme 2: There are multiple times a snack can be given to a client.

The themes and summaries are presented below for each code.

***Decision making about food.*** This code was defined as the way decisions are made regarding food and meal planning. There were two themes that emerged from the data. The first theme suggests that the staff will always plan a meal around the clients' likes and dislikes. When the DSP staff are planning a meal, they will always consider what the clients would prefer. There are several methods the staff use to learn about their clients' food preferences: asking clients directly in a formal house meeting; inquiring informally during daily interactions; and talking with them during grocery shopping trips and when going out to a restaurant.

Generally, DSPs will ask the clients directly in a formal setting. Does Ally do this one on one or in a group meeting? This implies there is no group meeting. Ally described the practice with her group: "at the beginning of the week we sit down [with all of the] clients [and] we give them the opportunity [to share] what [they] would like to have this week and they'll say [what they want to eat]." Sally echoed what Ally said in the description of her group: "we have a client meeting once a month... they always have food choices in the client meeting; and so, they always tell us what they want." The staff also ask the clients informally on a day to day basis what they would like. Jane described how she will ask her clients everyday she comes into work what they would like to eat: "I always come in and say what would you guys like to eat, at that point everybody is throwing out what they want and we try to come to some sort of agreement of what we want to eat."

During grocery shopping trips with clients, clients voice their opinion of what food they would like to be purchased for the home. The ability to go to the grocery store and voice their opinion is important to the clients as stated by Ally:

I always like to include them on everything especially when it comes to meal planning because that's like the most important time to them because they get a chance to have input on something that's going on in the house so I always like to include them in, especially grocery shopping, they love to go grocery shopping.

However, this activity can result in clients making impulsive decisions where a client may pick out a food item and throw it into the basket or they may think they want something they had last week but then see something different the following week and want it. Ally described what can happen: "when they get to the store they might say 'Oh I wanted this this week' but when we go to the store they see something else so now they change like maybe we could have this this day". Not only is going to the grocery store important to the clients but the staff also believe that it is important. Ally commented that she felt clients, "should be in on [planning so] they should have a choice to go to the store and make different decisions." It is important that the clients have input on the food decisions since most of the money used to purchase the food belongs to them. Jane stated "It's what they want; it's their food, their money so they should have an input. Their input should matter." Nicole stated that the agency has a motto "let them do as much as they can, don't handicap them."

Staff will also look to the clients' preferences when going out to eat. Sally explained how her clients who can go out to eat decide where they are going: "they literally tell us we want pizza and so that is where we are headed."

With nonverbal clients, the decision making is handled differently. Sally shared what she does with one of her nonverbal clients who is unable to go out to eat: "we give him choices of what he wants [from the restaurant] and then we will go get it and bring it back [to the house for him to eat]."

In addition to the clients specifically letting the staff know what they like, the staff also get to know the clients through working with them so they have an understanding what the likes and dislikes are of a client. Through this understanding the staff can provide what the clients like even if the client doesn't voice their opinion. Overtime DSP staff learn their clients' likes and dislikes and use the information for planning. Nicole summed it up: "[even] if they don't plan we as staff pretty much know what they like."

The second theme that emerged suggested that each staff member has their idea what food the agency requires them to provide. The staff have different ideas as to what food items they are required to provide to the clients. The requirements will vary depending on the needs of the client. There were two subthemes that emerged within this theme.

Subtheme 2a suggested there are standard requirements for clients with a general diet. Ally explained, if there are no restrictions to the client's diet then there is less guidance: "if it's general, we give them basically whatever we come up, like whatever we

had planned to cook for that day.” Sally knows she is to provide vegetables to her clients but she also knows that she can’t make the clients eat them. Jane believed that each client was supposed to get a choice from each food group while Ally reported that she was required to serve meat, starch, and a vegetable.

Subtheme 2b suggested that restrictions to diet play a vital role in planning meals. When planning the meals for their clients, the staff must adhere to any medical restrictions that must be factored into what they are served. Sally explained: “If they come back from hospitalization, and they have restrictions on their diet we go by that until the nurse tells us so we no longer have to”. When Jane was asked about providing a special meal to any clients with a special diet she replied that if there was a special diet then variations would be made to accommodate the diet. Nicole reported that she took great responsibility for making sure that she followed the restrictive guidelines when she commented “we’ve got to stay within our guidelines.” Allergies to certain foods can also affect what a client eats. Sally described the situation regarding one of the clients she serves: “he doesn’t have any restrictions [except] he is allergic to grapefruit so we try to give him a variety of everything [else] because he likes to eat.”

To summarize there are a few ways in which the DSP staff members make decisions about the food they will provide for the clients they serve. The DSP staff will have a house meeting with their clients to create a menu that encompasses all the clients’ likes and dislikes as well as the requirements that are needed per the agency. With only general agency guidelines in place for meal planning, staff members are left to be creative in how they make decisions about the food for their clients. The staff will bring

clients with them to the grocery store to purchase the food for the home. Clients can choose what food items they would like to have. If there are any medical restrictions for food items, the staff will provide food that is not a violation to that restriction.

***Training regarding meal planning.*** This code was defined as the training that the staff received regarding meal preparation. One theme emerged from the data which suggested that the staff are required to participate in a basic food handling training; specific nutrition training is required for houses that have residents with dietary restrictions.

When a staff member is on boarding with the agency they are required to participate in a mandatory training that was developed by DHS. Sally described the training when she started working at the agency: “we received a training, when I first started. [It was] about meal planning, and that was the only training we received...DSP from DHS.” Jane reported a similar experience: “we took a class before we even came to the house.” When asked if this was the training from DHS Jane replied “yes.” Per Jane and Nicole, in addition to the training upon on boarding there is also an annual training: “there is always a follow-up, an annual training, training for food preparation. DHS requires annual recertification to keep you certified” (Jane) and “it’s policy to renew training pretty much every year; whatever training we have” (Nicole). The training that is required is a basic training and does not cover in depth how to prepare a well-balanced and nutritional diet; it is more about basic food handling procedures. Ally elaborated on the training:

They talk about the different food temperature [requirements], what we should know, or how many days you can once it is thawed out, or how many days to leave it in the refrigerator, or how many days to leave leftovers in the refrigerator, just like basic stuff. It is not like major training. But we do go over the different health issues like cleaning the meat and just keeping all the food sanitized and safe for the consumers.

If the house has a resident (client) that has been given medical restrictions by a physician, then there will be a more extensive training regarding that client's specific dietary needs. Nicole explained how she received additional training regarding a diabetic diet when one of her clients was close to becoming insulin dependent.

It is up to the staff to follow the training and DHS guidelines of Clients' Rights (Appendix H). Nicole explained the situation with her client who had diabetes:

The nutritionist came in, and she said this is what we can have, or this is what's best to have. Because they can never tell you, you can't have this. But [they can advise that] this is what's best to have. We try to stay within that guideline of what's best to have.

To summarize, when the staff are on-boarding they are required to participate in a basic food handling training that touches briefly on the specific food items to provide. However, if the staff is assigned to work at a residential home that has at least one client with a medical restriction, such as diabetes or high blood pressure, then they are given more training on that specific medical condition.

*Money sources for food purchase.* This code was defined as where the money is obtained to purchase food for the clients. There was one theme that emerged from the data. This theme suggested there are multiple sources of money for food purchases. The two main sources are Link cards and petty cash. Staff explained that Link cards are food vouchers provided by the government. There is a set amount of money applied to the card monthly, which is set by the government; it is about \$194. Petty cash is additional funds provided from the agency; each house receives \$250 every other week. The petty cash can be used for any items the house may need not just food. According to Nicole: “each [client receives] their own link card every month. We also have petty cash and every two weeks we get petty cash money.” The number of Link cards a house receives is dependent on the number of clients who live in the house. Sally explained that the money on the Link cards for each client is combined and used to purchase food for the home. For example, if a house is comprised of four clients named Joe, Sean, Bob, and Ken, then the Link cards for Joe, Sean, Bob, and Ken will be combined to purchase the food for the four clients. If there are seven clients living in a house then the Link cards for the seven clients residing in the house would be combined.

The petty cash is used to help supplement the Link cards as well as provide special treats and outings for the clients. Nicole shared how she uses petty cash to provide special treats and outings: “pretty much with [petty cash] we have a choice of eating out or buying some specialties, you know like a treat.” Ally described how she uses petty cash to supplement the Link cards when additional money is needed: “this month was a holiday so [we] needed a little bit more for the holiday so [the agency] also gives us petty



cash to supplement.” According to Jane, there are enough money sources to provide the food needed.

To summarize, the money used to provide food for the clients in the homes comes from several sources. The main source is from Link cards, which is a government issued voucher that is replenished monthly with a set amount of money established by the government, about \$194 per client. The money from the Link cards for each client are combined in a home and used to make food purchases. In addition to Link cards, each house is also given \$250 petty cash every other week from the agency. The petty cash is used to supplement the link cards for necessary items, as well as to provide special treats and money for eating out.

*Information about clients’ dietary needs.* This code was defined as the information that the staff receive about the clients they serve. There were three themes that emerged from the data. The first theme suggested there are different ways in which dietary information is obtained.

When a client first enters the agency, they are asked several questions pertaining to their dietary needs, likes, and dislikes. Sally shared her experience:

When they first come [to the agency] we go over a meal plan with them. We find out what they like [and] what they don’t like. You know, how often would they want to eat, what kind of snack [they want] so that I know what it is I need to buy for that person.

Medical personnel also provide information regarding dietary needs of the clients as explained by Ally: “each client has a doctor’s order, a diet order [from the doctor].”

Jane included regular monitoring of the “client’s weight [to] know if they’re gaining too much weight or not enough weight, so we can keep their diets [accordingly].” There are some clients who have parents that are involved and the parents share information regarding the dietary needs of the client. Nicole shared her experience:

I have a couple of parents that do a lot of research with the issue with their particular child and they would bring it to our attention and we would talk to case management [and ask] can this be done, what’s the protocol. We get a lot info[rmation] from the parents.

The second theme suggested there are different documents that provide the staff with clients’ dietary information. There are a variety of documents that the staff can refer to so they can understand the dietary needs of each client they serve. Each client has an Individualized Service Plan, also referred to as ISP. Sally shared that the ISP will contain all the information you would need to know about a client, even their dietary needs: “we have an individualized service plan for them and in that is their dietary plan, if they have any restrictions it will say it; if there are none it will say it also.” Another form that the staff can refer to is a SASSY form. This form is like a face sheet and includes all pertinent information but with fewer details. Jane explained her use of this form: “there’s a SASSY form that has the...it is like a face sheet of a client that gives you all their information.” An information packet is another document obtained from the clients when they first enter the agency. In this packet, many questions are asked to understand the client’s needs, likes, and dislikes. Nicole commented on the usefulness of this packet:

We have an information packet about each client; their religious background, guardian, their family, a [contact] list; their medication list, their allergies, their medical needs. We just have an informational packet about each client. So, that's pretty much how we find out [about the needs of the client].

Another document that the staff have access to that contains dietary information of the client is the orders from the physicians. As shared by Ally: "each client has a doctor's order, diet order."

The third theme that emerged suggested that when there is documentation about dietary needs they must be followed. It is necessary that the instructions are followed so that the clients will receive the best care possible. According to Ally: "We just go by their diets just to make sure that we're meeting all of their needs." Jane echoed Ally when she explained: "we are always going to refer back to that sheet to make sure we are giving them the proper thing." When planning a meal each client's specific plan is taken into consideration. Ally explained her process while grocery shopping: "So, when grocery shopping that is the first thing we think about, how can we make this meal good for everybody? How could everyone enjoy this meal without any issues?" The staff establish a relationship with the clients and get to know what their needs are, which makes it easier to provide individualized dietary care as Nicole shared, "staff know, what's on [the clients' sheets] what [the clients] can and can't have. So, it's not hard to keep them on track."

To summarize, information about the clients' food preferences and restrictions are obtained in a variety of ways. When a client is first entering the agency, there is an intake

that is completed by the client and his/her family. Besides the initial intake, the staff will also obtain information from medical personnel. There are also some clients who have guardians, or parents, that will keep the staff updated of any changes or concerns. If there are dietary needs that must be addressed by the staff, the agency has several forms available for the staff to refer to. In the case that there are dietary restrictions the staff have the responsibility to follow the guidelines provided for the safety of the client.

***Teaching clients about healthy eating.*** This code was defined as the way the clients are taught about how what they eat affects their health. There was one theme that emerged from the data. This theme suggested that the DSPs informally teach the clients they serve about healthy eating.

The DSPs are continually teaching the clients about healthy eating habits in an informal manner. Sometimes the teaching transpires through a sit-down conversation as Sally describes: “well in our monthly meeting we try to discuss healthy eating.” There also are hands-on approaches where the clients learn while they are doing food related activities as Jane explained her experience:

I try to tell them about calories when we go shopping, [I] tell them don't look at too much salty stuff; that's just how I do it. They are learning as we grocery shop because I take them grocery shopping with me.

There are also staff who model the healthy eating habits for the clients by not having unhealthy items available. Nicole shared how she sets an example in her house:

If you don't buy the extra stuff and bring the extra stuff in as a temptation. So, yeah, we try to stay away from bringing the extra stuff in so we have a choice of what we have in the house.

There are times when the clients are not willing to listen to the advice of the staff. When this occurs, the staff will try to suggest some other alternatives to be as healthy as possible. Ally described her process:

[The clients] get in their moods and they'll be like 'I don't care I want chips again.' We'll be like maybe we should have something else, they say 'no', then we say maybe if you have chips twice today then you can have a fruit twice tomorrow. So, you just keep trying to give them an option, of course you can't say 'no you can't have it', but just keep trying to weigh the options.

The staff sometimes must be creative in showing clients healthy eating habits because coming right out and saying it will not work and lead to more noncompliance and Sally shared:

One client, he is independent, but he will eat a whole apple pie. [He will] walk down the street and eat it before he gets [home] so we won't know. I try to [say], 'are you going to the store, are you going to buy an apple pie. Don't eat the whole thing, save me a piece.' So, then he will save some because he thinks I want some but I don't really want some I just don't want him to eat it.

To summarize, the clients are taught informally about healthy eating by the staff in a variety of ways. The staff will use everyday activities such as grocery shopping or cooking to demonstrate healthy eating options. The staff may also model healthy eating

by setting the example. In the cases where the clients are not open to the healthy eating suggestions that are given by the staff, the staff must be creative and find alternative ways show a client healthy eating habits rather than telling them.

***Beliefs about what staff feel is a healthy meal for clients.*** This code was defined as the opinion staff have regarding what is healthy for clients to consume. There were two themes that emerged from the data. The first theme suggested there are some common beliefs of the types of food that are healthy. Staff share several beliefs in common regarding what they feel is a healthy meal to serve their clients. The staff believe that a healthy meal would be well-balanced and be comprised of certain items specifically fruit, vegetables, protein, and a starch as explained by Sally:

I think what should be included is a fruit and a vegetable. Now the fruit could be juice or a solid piece of fruit, you don't want to do both. [Also] a vegetable, protein, and starch. I like starch better than a lot of carbs. That is just my preference.

In addition to the specific items that a meal should include the staff also believe the way the food is prepared is a factor. The negative feeling toward fried foods is a primary concern as Jane shared her belief of how a meal should be prepared: "baked or sautéed, not fried. But of course, I believe that baked is healthier." The beverages that a client consumes is also believed to be of importance when determining if a meal is healthy. Water is highly favored and soda/pop is considered unhealthy as Nicole commented: "we try to encourage them to drink water... we stay away from sodas as much as possible." The staff believe that it is important to include as much nourishment

as possible but also prepare the meal so the clients will enjoy it. For this to happen the staff will sometime make alterations to the meal such as excluding the red meat to a favorite dish, or preparing a fancier meal such as stir-fry so the meal is not so basic as a meat, a starch, and a vegetable. Ally explained her process:

We'll change [the food] up, make [the clients say] 'ok maybe we can have this again', or maybe 'it tastes good this way'. [I also say] 'we don't need mashed [potatoes] or rice today let's fill up on vegetables.' Sometimes, we'll have spaghetti [and I'll ask] 'no ground beef today let's try the pasta with just the sauce and butter or however you guys like it.' Let's make it fancy. You know, I'll do it like that and not always have strictly a vegetable, starch; we'll switch it up but most of the time I try to make sure they get the nourishments that they need, the healthy, the bad everything else that they need. So, I go like that.

The second theme suggested the DSPs believe portion is important to healthy eating. The DSPs believe that portion size is a major factor when it comes to healthy eating. The staff relate the clients' weight to the amount of food they consume as Jane compared the weight of her clients to food portion: "no overweight client because they haven't been eating out of proportion." The staff try to give the clients a meal that is proportioned with what they need factoring their gender and age as well as any physician's orders as Sally explained how her house processes portion size:

Everything is more proportioned so, like I said, because they are young men we can't give them just one piece of chicken so give them two maybe three at the

most. Not four, five, or six. The only person that may get four has double portion, that is only because it is recommended in his diet.

It is also the belief of the DSPs that the clients should be given special treats, however the treats should be in small portions. Nicole described the practice with her group:

If we go out for a movie or something we will have a little popcorn, but we'll share it. We [also] get a soda and we have little cups; we'll share it so instead of having a whole soda we'll have little portions.

There are times when the clients refuse to follow the directions of the staff and decide to eat whatever they want, in these cases the staff will attempt to limit their consumption of unhealthy items by suggesting eating a small portion as Ally commented:

Some days [the clients will] be like no I want another piece of pie. Then I'll [say], 'maybe if you do get another piece of pie how about cutting it in half; maybe let's not eat the whole pie, maybe let's split it maybe we'll have the rest of it tomorrow.' [Same with] a piece of cake, 'let's split that, let's moderate it, let's make sure that even though you are still getting what you want but it's not as bad.'

To summarize, the staff have common beliefs regarding what a healthy meal for clients should consist of such as vegetables, protein, and a starch. The staff also uniformly believe that a lot of water should be consumed and less soda/pop. It is also believed that fried food should be at a minimum and there should be more lean meats that



are either baked or boiled. The staff feel that portion size is a significant part of providing a healthy meal for clients.

*Use of snacks in the agency.* This code was defined as the snacks that are given to the clients between meals. There were two themes that emerged from the data. The first theme suggested there are a variety of snacks that are provided for the clients. Jane shared how her clients voice their opinions: “it is just when [the clients go] grocery shopping [that] they pick out what they like and what their favorites are.” The types of snacks provided are dependent on the house, some houses provide a more structured guideline as shared by Nicole about her house: “They do have choices but our choices are this, this, and this. Not sugar, not candy; it’s in our guideline choices.” Other houses are more focused in providing what the clients prefer as Ally explained about her house “My house, they [like] desserts, so they love cake, they love pies, and stuff like that.” For some of the clients the staff are not involved with the snacks because the client provides their own as Sally commented on her experiences, “[Some clients] buy their own snack, I don’t even know what they have, it [is] sitting in their room. So, they could probably have everything.” There are times when the snacks provided are dependent on certain medical needs of the client. Sally explained the reason behind snack choices for one of her clients: “I like to buy Activia because he has bowel problems, so that tends to help so he loves it.” Ally also shared how she explained to her client about the snack choice based on medical concerns:

We are [going to] let you have dessert first and then before you go to sleep we will give you that half of sandwich to balance it so when you go to sleep you won't go into your sugar coma.

The second theme suggested there are multiple times a snack can be given to a client. Snacks are a part of the daily regimen at this agency, however the times and reasons for the snacks vary depending on the client and the house they reside in. There are certain clients who receive a snack regularly at certain times of the day as Nicole described: "we have like two snacks a day, usually at 4:00, they get one before meal preparation after a long day at the center." Sally also commented how the dependent clients will receive a snack after the day program:

We do have an autistic boy and we do like to get him a snack when he comes in only because he has had an hour car ride from the main building so he is hungry but it is not dinner time yet. So, we give him a snack to subside him then and then he gets a snack after meds and then he will go to sleep.

There are also some houses that are less structured when it comes to snacks and the clients can get a snack when they ask. Jane explained the structure in her home: "Whenever they ask for it, after dinner of course, or they may take it to the day program for lunch." Additional snacks may also be given to prevent a maladaptive behavior from continuing. Ally described her experience:

Sometimes you have the [clients] that have behaviors. They'll be like 'oh I'm hungry I want this' and they'll be [displaying] a behavior. They'll be like 'can I get that', we'll [reply] 'sure [but] let's try to get calm first, and then once you get

calm then we'll go ahead and give you that snack.' Once they're calm we'll go ahead and give them that snack so now they're happy. Because it's something to end the behavior.

To summarize, snacks are a part of the agency; however, each house varies in their use of snacks and what snacks are provided. There are some houses who use snacks to aid in behavioral intervention and yet there are some houses that will not. Some houses have a set schedule for snacks and other houses will allow the clients the freedom to choose when they want a snack. There are some houses that have a strict guideline they follow when purchasing snacks and other houses have clients who will purchase snacks on their own and the staff are unaware of what they are purchasing.

***Composite summary for DSP.*** When DSPs are deciding what food will be provided for the IID they serve there are several considerations taken. First, the DSPs will consider the clients' likes and dislikes. They will ask the clients directly in a formal setting. The clients also get to participate in the grocery shopping with the DSP staff where they can choose specific food items they want. The ability to go to the grocery store and voice their opinion is important to the clients.

Another consideration that the DSP staff take when deciding the food that is provided for the IID is if there are any restrictions for the client. There are different documents that the agency has in place for the DSP staff to refer to about the clients' dietary needs. Some of the documents include: an Individualized Service Plan, a SASSY form, an information packet, and the orders from medical personnel.

The DSP staff also may consider their personal beliefs when they make decisions about the food provided for IID. Some beliefs that are factored into their decisions include portion size that is proportionate to weight and height and gender, minimizing fried foods, reducing sugar consumption, and including plenty of fruit and vegetables with each meal.

Besides standard meals, DSPs also provide snacks for the clients, however the times and reasons for the snacks vary depending on the client and the house they reside in. The dependent clients will receive a snack after the day program but the independent clients do not have a set schedule for snacks. There may be times when an additional snack is given to a client to prevent a maladaptive behavior or for medical reasons.

Money is another factor that the DSPs must consider when deciding on the food they will provide. There are multiple sources that the staff and clients receive to purchase the food for the house. The two main sources are Link cards and petty cash. Link cards are vouchers given from the state and petty cash is extra funds that the agency provides for the houses. The amount of Link cards available for the home is dependent on the number of clients that live in the house. The petty cash is used to help supplement expenses that the Link cards could not cover as well as special treats and outings. Jane explained that there are enough money sources to provide the food needed: “they are always [going to] have food.”

Though the staff have many considerations when deciding the food that will be provided for the IID they are not given much formal training from the agency regarding the specific foods to provide. The DSP staff are required to participate in a mandatory

training, upon onboarding, which was developed by DHS. In addition to the training upon onboarding there is also an annual training that DHS requires the agency to provide regarding food preparation. The training that is required is a basic training and does not cover in depth how to prepare a well-balanced and nutritional diet; it is more about basic food handling procedures.

If the house has a client that has been given medical restrictions by a physician then there will be a more extensive training regarding that client's specific dietary needs. Even with the training and the guidelines it is still up to the staff to follow them since the clients still have their rights.

The DSPs, are continually teaching the clients about healthy eating habits in an informal manner. Sometimes the teaching transpires through a sit-down conversation such as the monthly meeting. The staff may also use hands-on approaches where the clients learn while they are doing food related activities such as grocery shopping. Staff will also model healthy eating habits for the clients by not having unhealthy items available.

There are times when the clients are not willing to listen to the advice of the staff. When this occurs, the staff will try to suggest some other alternatives so the food can be as healthy as possible. The staff sometimes must be creative in showing clients healthy eating habits because being too straightforward would result in the clients feeling overpowered and lead to more noncompliance with healthy eating.

**Supervisors.** The supervisors (and administrators) data was less detailed from the DSP case due to their indirect role. Table 6 depicts the themes that emerged from the data per each code within the supervisor case.

Table 6

*Supervisor Themes*

Code	Supervisor Themes
Decision Making for food (DF)	Theme 1: The staff will plan a meal around the clients' choices. Theme 2: Staff follow dietary restrictions when planning meals. Theme 3: The supervisors have a small amount of direct involvement with meal planning.
Training Regarding meal planning (TRM)	Theme 1: There is a lack of training from the agency.
Money Sources for food purchases (MS)	Theme 1: Money for food purchases come from a variety of sources.
Information about each client (IC)	Theme 1: Dietary needs are obtained from a variety of places and documented. Subtheme 1a: Special dietary instructions must be followed.
Teaching clients about healthy living (CHL)	Theme 1: Supervisors have a variety of ways they teach the clients about healthy eating.
Beliefs about what you feel is a healthy meal for clients (BHM)	Theme 1: Supervisors believe there are certain criteria that must be met for food to be considered part of a healthy diet. Subtheme 1a: There are a variety of foods that are considered healthy. Subtheme 1b: Supervisors' belief about portion size varies.
Use of snacks in the agency (US)	Theme 1: The types of snacks provided are determined a variety of ways. Theme 2: The reason a snack may be given varies.

*Decision making about food.* This code was defined as the way decisions are made regarding food and meal planning. There were three themes that emerged from the data. The first theme suggested the staff will plan a meal around the clients' choices.

When the supervisor is directly involved with planning a meal for the clients they will consider what the clients would prefer by informally asking them. Ben described his practice with his clients: "I would pretty much go to them and figure out [by asking], what have you eaten, if I'm doing the cooking, and then try to provide [that]. So, it is by choice." Cara also explained her process: "I always give them a day when I come and cook dinner and [I] usually [ask] what do you guys want for my day... they get to choose what it is and then I'll shop for that and then will cook [it]." Faye similarly shared about how the clients are informally asked about what they would prefer for a meal: "Usually it would be daily that we wait and see what they want to eat."

Cara, Faye, and Eva made general statements about the clients providing input on meal planning through grocery shopping. Cara explained how the clients can choose to go to the grocery store with the DSP. Faye shared how the clients pick out items from a sales ad and the staff take the clients with them to the grocery store to purchase the items. Eva explained how grocery shopping could be a goal for a client and when they participate in the shopping they can also pick out a special treat.

The clients are also asked about their food preferences in formal settings. Cara and Ben shared how their CILAs obtain their clients' food choices: "they are asked during their monthly meeting what they would want" (Cara) and "There is a council

meeting for the clients once a month, we sit down...And we ask them what they would like to eat this month” (Ben).

There are a variety of ways that the supervisors would make sure that the meal they provided is what the clients want to eat. Each supervisor explained their different process. Ben reported: “the way I do it is [I ask the clients] what they truly like [and] we try to have [it] twice a week.” Cara’s practice is different from Ben’s: “each week somebody gets a day to choose what they like.” Eva explained that she allows her clients to be a part of all aspects of food preparation: “Cause my guys are kind of hands on so I do let them help with certain things... So, they are very involved with everything [regarding food preparation].” Faye reported that she tries to make sure all the clients agree on the meal:

It [would] be food they agree [on], the vegetable we are all going to eat together, then that’s the vegetable we’re [going to] cook. With the meat portion of it, it’s just all of them agreeing to it. They’ll choose a few and be like ‘ok yeah, I want that, yeah we’re [going to] eat that’.

The second theme suggested that staff follow dietary restrictions when planning meals. When preparing a meal for the clients the staff follow the dietary restrictions that are set in place. Eva described how her groups prepared a meal: “we prepare them strictly by what their diet is in their charts.” Cara shared how one of her homes follows a no wheat diet: “I do have one diet that has no wheat, so we are real strict for what she has and even for what is purchased in her unit.” When there are restrictions the staff would



deter the client from eating something that could be harmful for them. Faye described how she would try to deter a client from eating something that is a restriction:

Unless it's something that they cannot have then [I will tell them], 'this is in your plan you know you can't have this', [or] 'you might be allergic to this', [or] 'let's try to get you something else instead of that.'

Eva explained that if there are no restrictions then there is less guidance:

If there [are] no restrictions, then that [client] will basically go by what [the staff] would do for [themselves] because they don't have a [special] diet ... we treat [a nonrestrictive diet] as [we] would treat [ourselves] or [our] own child; what [we] would do for [ourselves].

The third theme suggested the supervisors have a small amount of direct involvement with meal planning. Though the supervisors do participate in the meal planning their direct role in meal preparation is minimal. Both Ben and Cara stated that they step in only when the CSS (DSP) is absent. Eva helps getting the meals started but not all the time: "Three times out of the week I would say that I am actually getting [the meals] started for my staff because I am there." Faye indirectly stated her lack of direct role with her statement: "when I do usually come in I ask what they [want] to eat, what [meal was planned], or what did they ask to take out" implying that when she does come to the houses she inquires more about why the decisions were made instead of actively participating in the decision.

To summarize, supervisors have a small amount of direct responsibility with meal decisions, which mainly occurs when the DSP is absent from work. Supervisors

encourage clients' choices when deciding which meals will be provided. The clients will be asked directly, while in a house meeting or informally, what they would like and the house will then agree what items will be served for their meals. Clients' food choice is also encouraged when the supervisors purchase food from the grocery store. Supervisors will also make decisions about food based on dietary restrictions of the clients.

***Training regarding meal planning.*** This code was defined as the training that the staff receive regarding meal preparation. There was one theme that emerged through the data suggesting there is a lack of training from the agency.

Supervisors report that staff do not receive adequate training to be able to provide a healthy meal for the clients they serve. When asked about the training they receive for planning a meal for clients Ben responded: "Not much, not much." Cara also expressed her concern of how the training from the agency is not where it should be: "So again, the education is not good across the board." Cara continues to explain that she, as well as the rest of the staff, are only able to prepare meals based on the knowledge they have: "We only give [the clients] what we [know]."

There seems to be more training and education involved if there is a special diet or restriction in the home. Cara shared her experience with agency wide training: "Not a lot of training unless there is a specific diet [needed for a person with] high blood pressure or [a special diet for] heart care. Other than that, there is no specific training." Eva echoed Cara's comment, "If there is a nutritional or special diet that needs to be [followed] they let you know." Sometimes the staff are left to educate themselves on the dietary requirements for the clients they serve. Cara shared that she will educate herself

on dietary needs since the agency does not provide adequate training: “A lot of times there [are] some of us who educate ourselves in what we have to do for the clients and what we need because agency wide we don’t have [training].” Though the training and education for meal planning is scarce agency wide, the staff do express a desire to obtain the knowledge and skill to provide the best meals possible to enhance the quality of life of the individual they serve. Cara expressed her desire for more training and education: “there are people who advocate for that [training]. I guess we are just trying to figure out how to get it.” Faye also stated her desire for more education: “What we think is healthy might not be healthy for some, so yeah, just to see how can we go about getting more information for them, to better suite them. Just better educating both, us and them.”

To summarize, there was consensus among the supervisors interviewed that the agency does not provide adequate training regarding how to provide a healthy diet for the clients. The supervisors think it would be beneficial if the agency would provide a formalized training educating the staff on specific food items that should be prepared for the clients. If a client has a special diet the staff is given more training about that diet, however it is not detailed in specific ways to prepare a meal tailored to the medical needs of the client. The staff felt that better education where they learn about healthy meal preparation would be beneficial for enhancing the clients’ quality of life.

***Money sources for food purchase.*** This code was defined as where the money is obtained to purchase food for the clients. There was one theme that emerged suggesting money for food purchases come from a variety of sources. Link cards, which is a voucher provided by the state and petty cash, which is extra funds provided by the agency are the

two main sources of revenue. Cara explained: “[clients] each have a link card and then I get petty cash twice a month.” Eva also shared that there is another source of money for some individuals called: “client funds.” The Link card is the primary source for the basic food. Faye explained how the Link card is used to purchase food for the clients: “Each individual [has a] Link card, that’s how we provide food for them.” The petty cash is used for special items and going out to eat. Eva explained how she uses the petty cash: “with the petty cash we take the clients out, because my house, per se, they do go out Fridays, Saturdays so the petty cash is for [that], if we go out for their meals.” Cara shared how she uses petty cash to assist with special activities: “if something special, like a birthday, happened and funds were taken and used for that then there is cash available to assist if needed.” Ben shared that the petty cash is also used to supplement the Link if needed: “if in fact we don’t have necessities we would get that out of the petty cash that is provided.” The main sources of revenue are assigned by group home. Each client receives their own Link card from the government which is combined with their housemates’ Link cards to purchase food for the entire home. The agency will also provide each home \$500 of petty cash per month to supplement the Link cards. Cara described how the funds are combined for the entire household: “they all have to eat, you can’t say ‘you can’t eat this week because it is not from your card.’”

To summarize, each client is given a Link card from the state to be used to purchase food. In each group home the money from the Link cards is combined and used to make food purchases for everyone. In addition to money from the state issued Link cards each house is also given petty cash from the agency to supplement the Link card if

there is not enough for necessities. The petty cash can also be used for special treats such as birthdays and eating out at a restaurant. In addition to the Link cards given from the state and the petty cash provided by the agency there are also clients who have their own funds that they may use to purchase food.

***Information about clients.*** This code was defined as the information that the staff receive about the clients they serve. There was one theme that emerged from the data suggesting dietary needs are obtained from a variety of places and documented. Each client has a chart that contains all the information about a client necessary to provide adequate personalized care. Eva reported that these charts are where you would find everything regarding dietary needs: “So, if you want to find information [about] any favorite [foods], what they like, what they don’t like, any of their allergic reactions, all of this would be found in their charts.”

Information regarding the clients’ dietary needs are obtained through a variety of places. The client as well as the parents/guardian of the client are primary resources for information. Eva explained who provides the information on the face sheet: “[The face sheet] has their diets and the special foods of what they like from the parents or the client’s [guardian].” Sometimes the clients themselves know what they can and cannot eat and share that information with their DSP and supervisor. Cara commented on how one of her clients shared her dietary information: “[The client told me] I can’t have wheat.”

Supervisors share that staff also learn about their client’s dietary needs through medical personnel. Physicians inform the supervisors of the dietary needs by providing a

physician's order. When asked about the information the agency receives regarding the clients' diet Ben explained how he receives information from the doctors: "yes, doctor's orders."

Subtheme 1a suggested special dietary instructions must be followed. The supervisors have shared how the staff have a responsibility to follow any documented dietary needs. Before the staff plan a meal, they would refer to the dietary needs of the clients. Eva described how she follows special dietary instructions:

Well I look at [the client chart] first because you do not want to give somebody something they cannot have, or something that would make them have a reaction, so it is always best to look first and then you go from there.

There are a variety of dietary needs that the staff must accommodate including cultural, medical, and mental health diagnosis. Faye explained how she would accommodate a client's cultural needs: "someone might be Polish so we would go get polish food." Eva shared how she follows special dietary instructions regarding food consistency: "we do have a client that is strictly chopped so when we are preparing his food it is a regular diet but his food is also chopped in a food grind." Ben explained how he handles a client that has special dietary needs due to his diagnosis of PICA:

He likes to eat so we try to provide him with a double meal so he wouldn't go around hunting and try to eat staples and anything else that is not edible. So, we try to fix things that he can eat and we give him double portions.

There are times when the client will try to go against his/her dietary needs and the staff are responsible to encourage compliance. Cara described how she deters one of her

clients who has Celiac from eating wheat: “[the client] will try [wheat] if she sees something that looks good [and say] ‘well I can have it this time’ but we will say no.”

To summarize, information about the clients’ dietary needs are obtained from a variety of sources including the clients themselves, their families, and medical personnel. The information that has been obtained can easily be made known to the staff through the several different documents that the information is recorded. If there are any special dietary needs that are documented, it is the obligation of the staff to follow those guidelines when providing meals for the clients.

***Teaching clients about healthy eating.*** This code was defined as the way the clients are taught about how what they eat affects their health. There was one theme that emerged from the data suggesting supervisors have a variety of ways they teach the clients about healthy eating.

Supervisors will informally teach the clients about healthy eating habits anyway that is conducive for the client. Ben described how he teaches one of his clients about the dangers of chocolate adding some humor as to not be too controlling:

‘If you eat that chocolate you may get the shaking buddy and I don’t know what I will do with you, I’m not going to the hospital with you’, I have to add the humor though, I’ll allow him to understand that this is not good.

With the straightforward comments, supervisors will give explanations and reasons why certain items should be consumed. Faye shared how she explains to her clients the importance of drinking water by describing its benefits: “I’ll be like, ‘remember you [have] to have a lot of water. Water cleans your body, it cleans your skin

up.” There are also times when supervisors would need to make an agreement with the client so the client would be compliant. Cara described how she negotiated drinking water with one of her clients:

The water thing, we have one [client] who will drink lemonade all day and so for me when he wants lemonade he knows that for every lemonade he has to have a water. So, he [doesn't] want to drink that much lemonade because [he knows he] can't drink that much all day. So, if he takes lemonade for lunch to the day program the next day he has to have water. [His parents agreed] because they couldn't get him to [drink] water at all. So, it works well for him.

Some clients are interested in learning healthier eating habits and will ask the supervisors for information. Faye described her experience: “We go over food pyramids and then the [clients] ask us questions about ‘[how] to lose weight’, or ‘what’s healthy that I can eat.’” The clients will not always take the advice of the supervisors, but supervisors still need to attempt to give better options. Ben shared his experience with one of his clients who is allergic to chocolate: “Would he take my advice, not a lot of times but I still try to stay away from those things that could harm him.”

There are also supervisors who believe that the client already knows how diet affects their health. When Eva was asked in what ways do clients learn how what they eat might affect their health she replied: “Oh they already know.”

As a supervisor, not all the information for healthy eating is given to the clients. Cara shared how she likes to encourage the direct care staff to provide healthier options:



“I don’t really try to put it on [the clients] but I do try to like say to the [DSP] maybe you shouldn’t [buy] so many ribs [for the clients].”

To summarize, supervisors utilize different methods for teaching clients about healthy eating and try to personalize the teaching based on the particular needs and inclinations of each client. Sometimes, when the client is willing to learn, the staff can be straightforward. Other times the staff may need to negotiate with the client so they will be compliant. The clients do not always agree with, or comply, with the healthy eating tips given by the staff but the staff will always attempt to share with the clients the healthiest choices.

***Beliefs about what staff feel is a healthy meal for clients.*** This code was defined as the opinion staff have regarding what is healthy for clients to consume. One theme emerged from the data suggesting supervisors believe there are certain criteria that must be met for food to be considered part of a healthy diet. The supervisors’ belief of a healthy diet is comprised of two specific criteria including the specific food items that are consumed, as well as the amount of food that is consumed.

Subtheme 1a suggested there are a variety of foods that are considered healthy per supervisors. Supervisors believe that the clients should be provided healthy options for meals. Eva explained that healthy can be found in a variety of foods: “I feel that all clients should basically have something that is healthy for them, not harmful. Honestly there’s different things in all types of food.” A variety of food items are considered healthy by the staff. Faye suggested that vegetables are a staple when providing a healthy meal: “You should always have a vegetable, [doesn’t] matter what kind.” Cara explained

how she includes her beliefs of lean meats in food preparation: “I don’t agree if they have a lot of red meat. When I do the shopping, I buy a lot of turkey [and] chicken. I buy wild rice I don’t buy white rice.”

Not only do supervisors believe specific items to be healthy but the way the food is prepared is also a factor to be considered when planning a healthy meal. Ben shared his belief regarding how meat should be prepared: “I am suggesting that maybe they need to eat some baked or boiled items instead of just fried food.” Supervisors also believed that the choice of beverage needed to be considered when planning a healthy meal for clients. Cara expressed her belief of drinking a lot of water and how she tries to encourage the clients to do the same: “I like for them not to have a lot of soda, I buy a lot of water, a lot of water.” Eva explained how her personal understanding of a healthy diet is used when she plans meals for the clients: “I have a firm belief that if I don’t eat it, if it’s not healthy for me then I wouldn’t put that in your system as well.”

Subtheme 1b suggested supervisors’ belief about portion size varies. Supervisors believe that portion control is a factor in a healthy meal for the clients. Ben described how supervisors assist in portion control by subtly regulating the clients’ plate size: “The plate size that we give them is small starting and if they want seconds then they can have seconds.” When there is a client that does not follow the directives of the staff about eating an unhealthy item, the staff will attempt to persuade the client to eat less. Faye shared one of her experiences with a client who does not engage in portion control: “So one of my clients just over indulges in everything... [I would encourage her to] eat half instead of whole.” Supervisors do believe that clients should be able to have a special

treat, but it should be limited. Eva described how she allows treats but encourages a limited amount: “They like Kentucky fried chicken, but not daily. I want baking [more] than anything. [But] if we do chicken or something like that, it would be an outing so I won’t deprive them of that.”

There are some supervisors who believe it is not their place to tell a client how much they should eat. Cara commented on how she believes it is not her place to tell a client how much they should eat: “I am [not] going to say no to someone if they want more; go ahead and eat it, if you want less you don’t have to eat that right now.”

To summarize, there are a variety of foods that can be considered healthy such as protein and vegetables. Water is another healthy choice to make when providing a meal for the clients. The way the food is prepared is a significant factor as well, with some supervisors feeling that fried food should be prepared less frequently as it is not considered to be a healthy choice. Some supervisors believe that meat should be baked more often. There were some supervisors who believed that portion size plays a role in healthy meals while other supervisors voiced their opinion that they did not believe that they should decide how much a client should be allowed to eat.

*Use of snacks in the agency.* This code was defined as snacks that are given to the clients between meals. There were two themes that emerged from the data. The first theme suggested that the types of snacks provided are determined a variety of ways. There are a variety of snacks that are provided for the clients and what is provided varied by supervisor. Ben reported that he provided cookies while Faye turned to fruit and dairy items as snacks. Faye would say to her clients: “let’s try to get fruits in there or maybe a

yogurt with granola.” Even with their beliefs about what types of snacks would be best to serve many of the snacks are determined by what the client wants. Faye described how she provides snacks based on the individual client:

One loves prunes, so we give her prunes for her snack when she comes in. One likes Cheetos, so she'll get Cheetos when she comes in. One likes fruit so we slice her a fruit [or] maybe if it's an apple or orange she [may] want to peel it so we just sit it out for her to get it. Some like crackers and peanut butter, some like...it just varies depending on what they want or have a taste for when they come in.

If a client has a special diet then restrictions will be put on the type of snack that they can have, however if there is not a special diet then there are no limits to what type of snack the client can consume. Eva explained how different snacks are provided depending on special dietary instructions:

For [the clients] who [are on a restrictive diet] we have saltines, we have halos, we have all kinds of snacks for them. We're not limited for the ones that [are] not [on a restriction] but we are kind of limited to the ones who are on a restrictive diet. So, we have the special [snacks] for them too.

The second theme that emerged suggested the reason a snack may be given varies. There are a variety of reasons a snack may be given to clients in the agency. There is a standard practice of receiving a snack after the clients return home from the day program as well as in the evening right before bed, however there could be alterations to this regimen in the case of special activities for the day. Faye shared how snack time differs when there is a special event at one of her homes:

They know that when they come in, [around] 4:00pm, they [get a] snack. Usually after dinner, [if] we don't prepare like a party or cake and ice cream [and] if there's nothing special, then they will have [a snack] right after [dinner]. [They also] get a snack after meds.

There are also times when a snack can be used as an incentive to modify maladaptive behaviors. Eva described how a snack was used to deter maladaptive behaviors with one of her clients: "But if he is calm and he goes to a counter to get [a snack] I don't restrict him from not having it because that helps with [the] calm[ing] down process." However, not all staff believe that using a snack as an incentive is an appropriate behavior intervention method. Cara expressed her disfavor for using food as an incentive: "I've had participants who have had that as a behavioral thing and I didn't like it because I didn't think that should be an incentive. But I've seen it yeah."

To summarize, there are a wide range of snacks provided for the clients such as cookies and fruit. Dairy products such as yogurt on granola are also used as a snack. The snack can be a client's own choosing or if there is a special dietary restriction the snack is determined by the supervisor. Snacks are given to clients as a standard practice at certain times but may also be given to modify maladaptive behaviors.

***Composite summary for supervisors.*** When supervisors are deciding what food will be provided for the IID they serve, there are several considerations taken. First, the supervisors will consider the clients' likes and dislikes. They will ask the clients directly in a formal setting at the monthly meeting. The supervisors will also informally ask the

clients daily what they like. There are different ways that each supervisor provides a meal based on the clients' preferences, but they all put the clients' choices first.

Another consideration that the supervisors take when deciding the food that is provided for the IID is if there are any restrictions for the client. There are different documents that the agency has in place for the staff to refer to about the clients' dietary needs. If a special diet has been documented then the staff feel obligated to follow the guidelines that have been set in place.

The supervisors also may consider their personal beliefs about what constitutes a healthy diet when they make decisions about the food provided for IID. Some beliefs that are factored into their decisions would be minimizing fried foods, making sure to include plenty of fruit and vegetables, and having clients drink water instead of sugary soda. Portion size was also used by supervisors when serving meals, however, not all believed they should determine how much a client should eat.

Though the supervisors play a role in meal preparation for the clients, their role is minimal. They will take on the direct responsibility of food preparation and meal planning only when their DSP is not available to work.

There are a variety of snacks (e.g., cookies; yogurt; granola) provided for the clients. The snack can be determined by the clients' choice or if there is a special diet then restrictions would be set in place. Snacks are given to clients as a standard practice at certain times but may also be given to modify maladaptive behaviors, though not all staff like the use of food as an incentive for positive behavior.

Money is another factor that the supervisors must consider when deciding on the food they will provide. There are multiple sources that the supervisors and clients receive to purchase the food for the house. The two main sources are Link cards and petty cash. The state provides the money for the Link cards. Petty cash comes from the agency. The amount of Link cards available for the home is dependent on the number of clients that live in the house. The petty cash is used to help cover expenses that go beyond the money the Link cards cover such as special treats and outings. There are also some clients who have their own funds they use to purchase food items.

There was a consensus among supervisors that the agency does not provide adequate training regarding how to provide a healthy diet for the clients. The supervisors think it would be beneficial if the agency would provide a formalized training educating the staff on specific food items that should be prepared for the clients. If a client has a special diet the staff is given more training about that diet, however it is not detailed in specific ways to providing special meal preparations. The staff feel that better education would be beneficial for enhancing the clients' quality of life.

Supervisors used different methods for teaching their clients about health living. Sometimes, when the client is willing to learn, the staff can be straightforward. Other times the staff may need to negotiate with the client so they will be compliant. The clients do not always agree with, or comply, with the healthy eating tips given by the staff but the staff will always attempt to share with the clients the healthiest choices.

**Administrators.** Table 7 depicts the themes that emerged from the data per each code within the administrator case.

Table 7

*Administrator Themes*

Code	Administrator Themes
Decision Making for food (DF)	<p>Theme 1: The staff will always plan a meal around what the clients prefer.</p> <p>Theme 2: There is inconsistency among Administrators as to what the agency requires them to provide.</p> <p>Theme 3: Restrictions to diet are important to follow when planning meals.</p> <p>Theme 4: Administrators must consider the cognitive functioning of clients when decisions about food are made.</p>
Training Regarding meal planning (TRM)	<p>Theme 1: The agency does not provide a formal training for the staff regarding how to provide a healthy meal for the clients.</p>
Money Sources for food purchases (MS)	<p>Theme 1: The money used for food purchases comes from a variety of sources.</p>
Information about each client (IC)	<p>Theme 1: The staff obtain information about clients in a variety of ways and document it.</p> <p>Subtheme 1a: It is imperative that documented dietary instructions be followed.</p>
Teaching clients about healthy living (CHL)	<p>Theme 1: The staff casually teach the clients about healthy eating in a variety of ways.</p>
Beliefs about what you feel is a healthy meal for clients (BHM)	<p>Theme 1: Administrators have certain criteria they believe will encourage a healthy diet.</p> <p>Subtheme 1a: There are a variety of beliefs about the types of food that are healthy.</p> <p>Subtheme 1b: Administrators believe portion is part of healthy eating.</p> <p>Theme 2: The Administrators believe that the clients should get to choose what is best for them.</p>
Use of snacks in the agency (US)	<p>Theme 1: There are various factors that determine the snacks that are provided.</p> <p>Theme 2: Snacks are given for multiple reasons.</p>



*Decision making about food.* This code was defined as the way decisions are made regarding food and meal planning. There were four themes that emerged from the data. The first theme suggested the staff will always plan a meal around what the clients prefer. When a meal is being planned, the clients' likes and dislikes are strongly considered. To determine what the preferences are for a meal the clients are asked formally. Lisa described her process with asking the clients what they would like to eat: "At the Residential Council meetings we ask, 'what do you like, what do you want, where do you want to go out to eat' and things like." Tina resonated the same process: "Monthly they have a residential council meeting, that's when the staff sit down with the participants and they just talk."

The clients can also express their preferences informally. Lisa described how her clients may share their dislikes: "[The clients] may come in and say, 'you cooking green beans but I'm not eating them'...we say 'ok you don't have to'. We listen to what they like and what they don't like." Irene also shared how her clients state informally their desires: "Clients will tell you what they want on a daily basis, on a minute to minute basis." Dan expressed how including the clients in the meal planning is strongly encouraged:

I know some of the houses aren't doing this, [but] when we do our meal planning each [client] should be a part of it. I know sometimes that doesn't happen, but it is their right to be a part of how we are going to spend the funds and what we are going to [provide for them]. So, I would like to see that more across the board.

The input of the clients is extremely important not only to the administrators but the administrators understand its importance to the clients. Tina explained her understanding of the clients' wants: "Because that's [the clients'] main thing, if they don't have control over anything else, they'll tell you what they want to eat."

Not only is the input from clients taken into consideration when decisions are made about the meals that are served but their lifestyle is also incorporated into meal planning. Lisa described how she included each client's lifestyle when planning what food to provide:

I do [the] grocery shop[ping], so when I am grocery shopping I take into consideration the household that I am shopping for. I take into consideration ethnicity. So, we have people of Italian descent, they love pasta, I have one lady she is Indian and she likes different spicier foods. One participant is gluten-free, so all of that has to be taken into consideration when doing the grocery shopping... We take [religion] into consideration always, because you know we want to respect their lifestyles, their religious beliefs and all that so all of that is taken into consideration.

Providing a meal that is preferred by all the clients in the residence can have its challenges and the staff accommodate and provide substitutions as needed. Dan explained his challenges in providing a meal that satisfies everyone:

Well it kind of hard to do because everyone has a different taste. We try to figure out a broader based menu that everyone is [going to] like. Some people may not like fish, we [have] figure out how we are [going to] do that, maybe cooking a

little bit of chicken. So, it is based really on what they like because we [have to] make sure they are [going to] eat it.

The second theme suggested there is inconsistency among administrators as to what the agency requires them to provide. The administrators who are responsible to enforce the policy and procedures of the home do not share the same food requirements that must be provided to the clients they serve. Dan and Tina shared the closest to the same requirements: “We definitely try to follow the food pyramid, there has to be a starch, a protein, some vegetables” (Dan) and “If they are on a general diet they are required to make a starch, a vegetable, and a meat” (Tina). However, Lisa was vague with what she believed to be a requirement commenting: “we try to give them a well-rounded meal.” This generic requirement can lead to many misrepresentations as not everybody defines well-rounded meals the same way. There is also the idea that each house is unique in the food that staff are required to provide. Irene shared her understanding of what she was required to provide: “When we go shopping [we] make sure we’re always getting stuff that [the clients] enjoy and like and that we know that they want to eat, while buying the healthiest version of it.” This statement implies that the staff are required to provide what the clients’ like and the healthiest version of it, which is a generic term and could also be taken several ways especially with staff who are not educated in nutrition.

The third theme suggested restrictions to diet are important to follow when planning meals. Following Physician Orders is one of the first steps that is completed when planning a meal for the house. Each administrator interviewed mentioned that

Physician Orders need to be followed. Dan shared the importance of incorporating the dietary needs of each client: “We make sure we are following everyone’s particular diet because we have people who live in one group home that have different dietary needs that we have to make sure we incorporate their dietary needs in every meal.” Lisa explained her process when planning a meal: “So, we take into consideration the doctor’s order and the individual when we plan their meals.” Tina described how during training the staff are taught to refer to the doctor’s order: “the staff in training was trained to go by the doctor’s order.” Irene described the procedure she follows when planning a meal for the clients:

First, we have to go house to house and we look what each house needs, you know, if there’s any physician orders or special dietary restrictions, any allergies to any foods, all that kind of stuff. So, those are first taken into consideration.

There are clients who do not have any restrictions per the physician but because they may overeat the agency needs to provide a restriction in their plan. Irene explained how dietary restrictions could be part of a client’s behavior plan:

There are some clients who would continue to eat if you let them, so there might be [a] protocol set up [where staff would inform the client] ‘you just ate so now we need to wait this amount of time and if you’re hungry in this amount of time you can have another snack.’ All [restrictions] follow their [behavior] plans.

The restrictions that are set in place provide the staff guidelines as to what needs to be provided for the clients. Lisa shared how the staff will have to follow a specific guideline for a diabetic client:

If there is [a client] who is diabetic I know I need to buy things that are lower in sugar. [Before] they go to sleep, their last snack [should] have enough sugar so they don't go into a diabetic coma during the night.

In addition, when there are restrictions it gives the staff more of a say as to what they can deny purchasing. Irene explains how she assists with the choices of the clients to ensure no restricted items are being provided: "So, I think it's a lot of them picking and us making sure that they're picking stuff that's not restricted from them."

The fourth theme suggested administrators must consider the cognitive functioning of clients when decisions about food are made. Each client is diagnosed with a level of cognitive functioning such as mild, moderate, severe, and profound. Higher functioning clients (typically mild and moderate) generally are able to express what it is they would like to eat and they voice their opinion of the meals that will be provided. Lisa explained that if a client is verbal they have the ability to say what they like or don't like: "if they are verbal and they can actually say 'I don't like vegetables' or 'I only like this vegetable,' all of this is taken into consideration." Tina elaborated on when her verbal clients are able to express their desires: "It all depends, like if the client is verbal then before they went to the grocery store they sat down and said [what they] like." Dan also expressed how he has tried to involve one of his clients in the decision making process: "I mean he is pretty high functioning so I have tried to sit down with him and the manager of the house to try to plan a meal around what he wants to eat."

For the clients who are nonverbal, accommodations can be made to assist the staff in understanding what the clients may prefer. Dan described how he accommodates his

nonverbal clients to express their preferences: “we have the [clients] that are nonverbal and we use visual aids with them.” There are cases when the staff may have to intervene in the dietary choices of the clients. Tina explained how she may determine the food choices for her nonverbal clients: “I mean for people [who are] not vocal, of course we set the standards and we make the choices for them [be]cause they’re not vocal [so] they can’t tell you.”

The cognitive level of a client also plays a vital role in how the staff can relay information regarding healthy options or food risks to clients. Dan explained how the staff could share health risks of food but only to the ones with a higher cognitive level: “we can definitely tell some individuals, the ones that understand, you know the reasons why you can’t have this is because of this health risk.” Irene described different barriers that may hinder the staff’s ability to relay information to the clients:

That’s just client per client basis in what they really need to understand, how much they’re interested in understanding, and sometimes some clients just aren’t [going to] get it; like they just can’t absorb it.

To summarize, when the staff are determining what food to provide, the clients’ preferences are strongly considered either by the staff formally asking the clients or the clients simply requesting. The cognitive level of the client will determine how much input the staff have in the decisions. If a client has a higher cognitive level, they can make decisions for themselves whereas a client with a lower cognitive level will need the staff to make the decisions. The staff will also provide food that is required by the agency, however, there is inconsistency among administrators as to what the agency

requires. The administrators are consistent in the understanding that when making decision regarding food decisions it is imperative that dietary restrictions are considered.

***Training regarding meal planning.*** This code was defined as the training that the staff receive regarding meal preparation. There was one theme that emerged from the data suggesting the agency does not provide a formal training for the staff regarding how to provide a healthy meal for the clients. Administrators reported that staff are provided with a basic training when they are hired that is required by DHS. Irene explained that the onboarding training is from DHS: “When you first enter the agency, they do some nutritional [training], within the DHS [requirements].” Tina explained that the training is generic: “It’s just a basic training that you have when you first are hired.” This training is primarily about basic food handling with a little emphasis on basic nutrition. Lisa, Tina, and Irene described what the training encompasses: “[The training teaches] how [to] clean and not leave meat out on the counter. [Also], how [to] thaw [the] meats and food” (Lisa). In the training “they’ll tell you the different food groups, and the difference between a starch and a vegetable. So, it’s just a general food groups training” (Tina). Irene added: “[the training reviews] the food pyramid and gives [a basic] guideline [of] a good well -balanced meal.”

There is additional training for the houses that have clients with a special diet. Irene described the additional training that one of her houses receives because of the diet restrictions:

some homes [receive] more training because there [are] more diet restrictions, or special diets, that must [be] follow[ed]. One of the homes that I have has a nutritionist come in and talk with the staff.

The homes that do not have any special diets are trained by the current staff working in the home and the supervisor. Irene described how some of her homes provide training for the staff: “Sometimes it’s just us training each other, the supervisor helps train the staff, as they first come in, on good healthy meals and how to help prepare it.” Administrators reported that staff will train the new staff on the clients’ eating habits however they did not say what constituted a well-balanced and healthy diet. Lisa shared how she trained her new staff:

When someone new comes in I may say ‘ok so you are going to be working in this house, this is Mary she does not like water, she likes all of her foods in different bowls, give it to her like that and you won’t have a problem. You will make her happy.’

To summarize, when the staff are first hired, they are required to participate in basic food handling training. If the staff are assigned to work for a house that has a client with a special diet they are given additional formal training regarding the specific dietary needs. The staff who are assigned to homes without any dietary restrictions receive informal training from the staff who are currently working in the home.

***Money sources for food purchase.*** This code was defined as where the money is obtained to purchase food for the clients. There was one theme that emerged from the data suggesting the money used for food purchases comes from a variety of sources. Two



sources that are received by most of the clients are Link cards, a voucher from the state, and petty cash, which are extra funds provided by the agency. Lisa shared the sources that the clients receive: “Each person gets a Link card and then we have petty cash.”

There are also some clients that may pay cash. Tina explained her understanding of how some clients pay: “I believe in the agency we have two clients that [are] private pay so they’ll pay cash.” Dan and Irene shared another source of money for some individuals. Dan explained that food may be purchased with “client’s funds.” Irene echoed Dan when she explained how some of her clients purchase food: “They have their own money, sometimes they choose to go buy themselves a snack, or go out with some friends and eat a meal or something.”

The petty cash can be used for multiple purposes. Irene explained that petty cash can be used for special items and going out to eat: “we have petty cash where they can eat out.” Lisa commented on how the petty cash is used to supplement the Link cards: “if we have a house that is a smaller base house, we have four people, sometimes it’s not enough with those Link cards so we can supplement with our petty cash.”

The petty cash and Link cards are allocated by group home. The Link cards are combined to purchase food for the entire home as well as the petty cash. Dan described the process for one of his homes:

The way it works depends on how many individuals are in the home. This house has six guys and six different Link cards. We go to the office, we pick up a link card, we go grocery shopping; it doesn’t matter whose card we get because all the cards are used for this one home.

To summarize, each client receives a Link card, which is combined with the Link cards for every client residing in the home. The Link card is used to purchase food from the grocery store and in the event that the Link cards are not enough to provide for the necessities, the homes are also provided with petty cash to supplement. The petty cash can also be used to eat out at restaurants or for special occasions. There are some clients who are self-pay and they do not receive Link cards, therefore they pay cash, which will be combined with the Link cards from the other clients.

***Information about clients.*** This code was defined as the information that the staff receive about the clients they serve. There was one theme that emerged from the data suggesting the staff obtain information about clients in a variety of ways and document it. The parents/guardians of the client will offer information during the intake process. Lisa explained the intake process and how information is received:

A lot of time when we do intake, case management [will ask questions about dietary needs]. Sometimes [the family will offer information even without being asked]. [If] the family tells you, ‘we don’t eat pork or we don’t do this’, we respect that.

The information will be documented in the clients’ charts to be referred to when deciding what meals to prepare. Irene shared that they plan meals according to what is documented in the clients’ individual charts: “[meals are prepared following their plans.” There is also a form from the agency that contains all dietary needs, not just ones of medical concern, called the SASSY. Lisa shared how one of her client’s dietary desires is

found on the SASSY form: “we have a participant who really loves macaroni so that will be in [the SASSY].”

The orders from medical personnel are another way the staff are informed of dietary needs for the clients. Irene described how she considers the physician’s orders when planning a meal: “we look [at] what each house needs; if there’s any physician orders, special dietary restrictions, or any allergies to foods.” If there is conflicting information obtained from different sources the information received from the medical personnel is of higher importance. Tina explained how the staff will follow any suggestions made by the parents as long as it does not conflict with the physician’s dietary restrictions: “as long as [the parent’s request is] not against the client’s diet; because what we have learned is that parents [will] voice their opinion of what they want their child to eat.”

Subtheme 1a suggested it is imperative that documented dietary instructions be followed. The staff have a great responsibility to follow the dietary needs of the clients they serve. There are several types of dietary needs that the staff are required to follow. Dan explains how the wants of the parents/guardians of the clients in his home determines the food that is provided:

The way we plan [the clients’] meal [is] we get a lot of input from the families.

So, we buy lunchmeat [that is] nitrate free, because a lot of [the food] is based on the family and how they want us to feed them.

Another dietary need that the staff would accommodate is any religious or cultural background. Irene described how one of her homes provided food to accommodate a

client's religious background: "[we had] a client who was Jewish and ate a lot of Kosher foods, so we were able to take into great consideration her religious background when we prepared her meal." The staff should also follow the medical dietary needs of a client. Lisa shared how she has clients with medical concerns regarding food consistency and how her staff consider these needs when preparing a meal: "We have certain people who must have their food chopped up or it has to be cut into fine small bite size pieces; so, all of that is taken into consideration." Medical restrictions are another dietary need that the staff must follow as Tina suggested:

We have a participant that's on a no caffeine diet but always asking for caffeine. So of course, when they sit down at the monthly meeting his main thing he's [going to] say is, 'I want 7Up and I want Pepsi, and I want iced coffee'; of course, we can't get that. If it's not against the doctor's order then we'll grant it.

To summarize, the staff have a variety of ways they obtain information regarding the dietary concerns of a client. At the time of intake, the client and his/her family are asked a series of questions that will allow them the chance to inform the staff of any dietary needs. In addition to the client and family staff also obtain information from medical personnel. The information that is obtained is documented in a variety of ways such as a physician order and the SASSY form. If there is a documented dietary restriction it is the responsibility of the staff to follow the guidelines that are documented.

***Teaching clients about healthy eating.*** This code was defined as the way the clients are taught about how what they eat affects their health. There was one theme that emerged from the data suggesting the staff casually teach the clients about healthy eating

in a variety of ways. Sometimes the teaching will occur with a sit-down conversation. Lisa described the practice among her houses: “Sometimes we sit down during those meetings and we may talk or maybe just in general sit down and converse with them.” There are times when the staff will try to persuade the client to eat something healthy through coaxing. Lisa explained how she uses persuasion to try to get her clients to eat healthy:

It is kind of like dealing with children, [I would] ask [the clients] to ‘taste it’ or say ‘you may not like her vegetables but maybe you’ll like mine so try it’ ... [I] may be able to get them to try it because they may taste it and say ‘oh I’ve never had it made like this.’

There are also times when the staff must find alternatives to the client’s choice because the staff understand that there are severe consequences such as adverse reactions. Irene described how she would handle a client who has requested a food item that is risky to their health:

If they’re wanting peanuts, then [I would] try to find them something else that’s more of like a crunchy slightly salty kind of substitute so that they’re still satisfying their craving without having something that they’re going to have a reaction to. If there is not anything that’s similar you can always offer them something that you know they thoroughly enjoy that they can have.

The staff may also try to make agreements with clients to show them better options. Lisa shared how some clients may not understand healthy choices and so she would make an arrangement that is easier for them comprehend: “Sometimes they don’t

understand what moderation means, so I would make an arrangement with them saying, ‘instead of drinking a pop every day you drink a pop every other day.’ Sometime that’s better for them to understand.”

The clients do not always listen to the information the staff give them. Tina shared her experience with her clients regarding drinking soda: “They don’t really listen to us because they feel that we just don’t want to buy it or we just don’t want them to drink it because they might wet the bed or something like that.” When the staff restrict a client and the client becomes upset then the staff will explain the reasons why such a suggestion was made. Dan described how he would respond to a client who is upset about a food restriction:

Individuals do get upset because they want something and you are telling them ‘you can’t get it.’ But you know you also try to explain to them the reason why; ‘it’s not that I’m trying to restrict you from something because you have a right, but we have to follow the doctor’s orders as well.’

To summarize, it is the responsibility of the staff to teach the clients how to make the best decisions for themselves even if the client doesn’t want to hear it. The staff must explain the reasons for any restrictions that may upset the client. There are times when the staff may sit down and discuss with the client healthy eating habits and there are times when the staff must negotiate an agreement for the client to comply with a healthy choice.

***Beliefs about what staff feel is a healthy meal for clients.*** This code was defined as the opinion staff have regarding what is healthy for clients to consume. There were

two themes that emerged from the data. The first theme suggested administrators have certain criteria they believe will encourage a healthy diet. There are different factors that the administrators believe will constitute a healthy diet for the clients they serve.

Subtheme 1a suggested there are a variety of beliefs about the types of food that are healthy. The administrators believe that there are some specific food items that should be prepared to encourage a healthy meal for clients. Tina explained her beliefs: “a healthy diet would consist of a meat, a starch, and a vegetable.” The way the food is prepared is another factor that determines if it is healthy. Dan commented on his beliefs about how food should be prepared: “I’m a big, firm believer in no frying, so we do a lot of meals in the crockpot [as well as] baking [and] grilling.” The administrators believe that each client may require some modifications in their meal so it could be more personal and healthy for them. Irene described her beliefs of healthy meals including specifics about the client: “I think the best meal is well-balanced nutritionally, with all [the client’s] background [considered for] their food [as well as] their likes and dislikes and what they [grew] up with [should] all [be] taken into consideration.” The staff believe that it is important to provide a meal based on the likes and dislikes of the clients. So, the meal can be healthier and still be what the client will want the staff will make a few alterations. Lisa described how she made alterations to a meal for one of her clients who really enjoys pasta:

[I] try to think of healthier options to it. Instead of giving her pure butter [I will] try a butter substitute to give her [and] wheat pasta. And then say, ‘you get the

pasta how about you get a big amount of vegetables to go with it.' Different ways so she can still get what she likes and then get something healthier with it.

Subtheme 1b suggested administrators believe portion is part of healthy eating.

Tina commented on her belief: "And I guess portion size would be, to me, what a healthy meal is." Portion can be important in two ways. First, the administrators believe it is important that the clients receive enough nourishments, so they will provide more food if wanted. Dan described how he makes sure his clients are receiving enough nourishments: "These guys all get seconds, except for one, they're very active and they eat a lot. If they request it, we make sure that we make enough to give them seconds." The administrators also believe that there are some food items that need to be controlled. Lisa described her beliefs about certain items that should be eaten in moderation:

I know that salty and sugary [food items are] not healthy for us to eat [too] much of, so if you are going to eat that every day then you wouldn't make that the [most of what] you eat. [For example,] mashed potatoes are loaded with starch, I'm not [going to] take my plate and do half of it mashed potatoes.

It is also the belief of the administrators that the clients should receive a treat, however it should be in moderation. Lisa shared how she provides treats in moderation to her clients:

I like to have a pop now and again, I like to have a cookie or ice cream, and things like that; I try to give them the same respect. Every day we're going to have something sweet, it may be something different but I'm not going to cut sugar out of [their] diet forever.



The second theme suggested the administrators believe that the clients should get to choose what is best for them. The administrators believe that the clients should get to choose what they would like to eat and it is not right for the staff to make the decision of what is healthy for the clients. Tina expressed her beliefs about the clients right to choose:

So, I feel like [the clients] should be able to eat whatever they want to eat. I don't feel [their meal] should be a starch, a vegetable, and a meat but that's how we prepare the food. I feel it should [be] whatever [the clients like]; if the clients want to eat hotdogs every day, fix them hotdogs every day. For people [who are] not vocal, of course we set the standards and we make the choices, but for the participants that can talk I think it's their choice, whatever they want to eat, whenever they want to eat it; I think it's their choice.

The administrators also believe that it is their responsibility to advocate for the rights of the clients and not dictate to them what they should be eating. Irene explains how she looks out for the client: "I'm always there to advocate for [the clients] and speak up for them saying 'hey that's something they don't enjoy,' or maybe 'they like hot sauce on that and that's ok for them.'" It is the administrators' belief that food is important to the clients and it is one decision that should be made by the clients themselves. Lisa shared her belief about not fighting with the clients over food since it is important to them: "That's my thing, choose your battles with certain issues and food is very important to them, A lot of them, because that is the only things they can control sometimes; what they eat and what they don't eat."

To summarize, there are specific food items that some staff believe are important such as vegetables, protein, and a starch. The staff also believe that way the food is prepared is a significant factor in if the item is healthy, fried food was established as not healthy. Food portion was another factor that contributes to the healthiness of a meal. The staff also shared that healthy is not always based on the specific items but also the client's relationship to it. For instance, culture and preference are also factors in if the staff feel a meal is considered healthy. There are also some staff who believe that it is the clients' decision to determine what is best for them and the staff cannot make that decision.

*Use of snacks in the agency.* This code was defined as snacks that are given to the clients between meals. There were two themes that emerged from the data. The first theme suggested there are various factors that determine the snacks that are provided. There are a variety of snacks that are provided for the clients. Irene shared her experience with snacks: "I've seen many snacks, anywhere from fruits and vegetables, pudding, yogurt, popcorn, chips. Many different types." There are various factors that determine which type of snack will be provided. Tina describes how the age of the clients in her houses is a factor when deciding what snack will be given: "our senior care houses eat a lot of fruit and cottage cheese, to me old people's snacks. Our younger houses may have cookies and milk." If a client is on a special diet then that also is a factor on the type of snack provided. Lisa shared how she decides snacks based on the special diets of the clients: "For the clients who are on [a] diet where they [are trying] to cut back on different things, I usually try to get good yogurts that are thick and almost ice creamy like."

Staff will try to provide portion control over the snacks so the clients can still receive their special treat without over indulgence. Lisa explained how she moderates the snacks for her clients: “I try to get the 100 calorie cookies so they can at least still get an Oreo cookie and it doesn’t taste so awful versus sugar free.”

The second theme suggested snacks are given for multiple reasons. There seems to be a standard regimen that snacks will be given once the clients return home from the day program and before bed. Tina shared her understanding of how most of the houses in the agency provide snacks:

When they come in from the day program they get a snack. The snacks might be waiting for them or if it’s their goal, one of the participants might come in [and] set the snacks out for everybody. [A] snack is usually given before bed time or right after med time. So, it’s usually routine how the snacks [are] given.

Some of the houses are more lenient on the snacks and will provide a snack whenever the clients want one. Irene shared how she allows snacks in her homes: “Clients eat snacks whenever they feel like it.” There are clients who are more independent and can provide their own snacks and can choose to purchase their own snacks at their leisure. Irene described how some of her clients provide their own snacks: “They have their own money [and] sometimes they choose to go buy themselves a snack.” Snacks can also be given as an incentive to alter maladaptive behaviors. Lisa reported about her clients: “[There are] some [clients] who are on different behavior plans where [the staff will say] ‘if you clean your room and do everything you’re

supposed to do you get an extra snack.”” Dan explained that not all clients receive snacks for behavioral incentives: “we never use snacks for behaviors. Not at least in my homes.”

To summarize, there are a variety of snacks that are given to the clients and the specific snack varies depending on the client. Senior clients generally will receive a snack that is different than what a younger client receives. A client with a dietary restriction will receive a snack different than a client without a dietary restriction. Clients receive a snack at various times. Some houses have a standard snack time while other houses have a more lenient protocol and allow the client to decide when they want their snack. There are also times when a snack is used to modify maladaptive behavior.

***Composite summary for administrators.*** When administrators are deciding what food will be provided for the IID they serve, there are several considerations taken. First, the administrators will consider the clients’ preferences. They will ask the clients directly in a formal setting. The clients also get to participate in the grocery shopping with the DSP staff where they can choose specific food items they want. Informally the administrators suggest that the clients share daily what they like or don’t like regarding the food items.

Another consideration that administrators take when deciding the food that is provided for the IID is if there are any restrictions for the client. There are different documents that the agency has in place for the staff to refer to about the clients’ dietary needs. If there are any special diets then the staff are obligated to follow the guidelines that have been documented.

The cognitive level of the client plays a role in the decision - making process for the administrators. The cognitive level of the client will determine how much input the staff have in the decisions. If a client has a higher cognitive level, they can make decisions for themselves whereas a client with a lower cognitive level will need the staff to make the decisions.

Administrators also consider their personal beliefs when they make decisions about the food provided for IID. Some beliefs that are factored in would be portion size, minimizing fried foods, and including plenty of fruit and vegetables. The administrators believe strongly that they are to encourage food items that are important to the clients such as culturally as well as preferred items.

Snacks are also a part of the daily regimen for food consumption. There are a variety of variables that determine the type of snack that is provided such as age, medical restrictions, and clients' preference. There are also variations when snacks may be given; some houses have a strict regimen and other houses are more lenient and allow the client to decide when they want a snack. There may be times when an additional snack is given to a client to prevent a maladaptive behavior or for medical reasons.

Each client receives a Link card from the state which is combined with the Link cards for every client residing in the home. The Link card is used to purchase food from the grocery store and in the event the Link cards are not enough to provide for the necessities, the homes are also provided with petty cash to supplement. The petty cash is extra funds provided by the agency. The petty cash can also be used to eat out at restaurants or for special occasions. There are some clients who are self-pay and they do

not receive Link cards, therefore they pay cash which will be combined with the Link cards from the other clients.

Though the staff have many considerations when deciding the food that will be provided for the IID they are not given much formal training from the agency regarding the specific foods to provide. When the staff are first hired, they are required to participate in basic food handling training. If the staff are assigned to work for a house that has a client with a special diet they are given additional formal training regarding the specific dietary needs. The staff who are assigned to homes without any dietary restrictions receive informal training from the staff who are currently working in the home.

It is the responsibility of the staff to teach the clients how to make the best decisions for themselves even if the client doesn't want to hear it. The staff must explain the reasons for any restrictions that may upset the client. There are times when the staff may sit down and discuss with the client healthy eating habits and there are times when the staff must negotiate an agreement for the client to comply with a healthy choice.

### **Across-Case Analysis**

Once the three within-case analyses were completed, I began the Across-Case Analysis. The data from the Across-Case Analysis was used to answer the RQ for the study and to document where information from previous research had changed (see Chapter 5). I followed the same procedure and codes that were used to conduct the Within-Case Analysis but this time I compared data from all participants. The reason for this was to identify where there were similarities and differences in themes across-cases

(levels of personnel). Table 8 (that also appears as Table 3 earlier in the chapter) illustrates the three cases—DSPs, supervisors, and administrators—that were used for this analysis.

Table 8

*Across-Case Analysis*

Cases
Direct Support Personnel (Sally, Jane, Ally, Nicole)
Supervisors (Ben, Cara, Eva, Faye)
Administrators (Dan, Lisa, Tina, Irene)

**Step 1.** To start the across-case analysis I first compared the themes that were developed for each code by case across the three cases. I found similar themes represented within each case. Table 9 depicts the themes across all three cases showing themes that were similar in bold print.

**Step 2.** I then used the data from staff members across all cases for the code Decision Making About Food (DF) to determine if any additional themes would emerge across-cases. I took the data from the spreadsheet that I created and read through it all. As I read, I began to see patterns emerge from the data. The criterion for a pattern to be present was that it was mentioned by at least one member of each case. These patterns were developed into themes.

**Step 3.** After the across-case analysis for the code Decision Making About Food was completed, I then followed the same procedure for the remaining codes. The new themes that emerged across cases are in the last column in Table 9.



Table 9

*Themes Represented Across Cases*

Code	Themes			
	DSP	Supervisors	Administrators	New
Decision Making for food (DF) Definition: The way decisions are made regarding food and meal planning.	<p><b><sup>a</sup>Theme 1: The staff will always plan a meal around the clients' likes and dislikes.</b></p> <p><b><sup>c</sup>Theme 2: Each staff member has their idea what food the agency requires them to provide</b></p> <p><b><sup>b</sup>Subtheme 2a: There are standard requirements for clients with a general diet</b></p> <p><b>Subtheme 2b: Restrictions to diet play a vital role in planning meals.</b></p>	<p><b>Theme 1: The staff will plan a meal around the clients' choices.</b></p> <p><b>Theme 2: Staff follow dietary restrictions when planning meals.</b></p> <p><i>Theme 3: The supervisors have a small amount of direct involvement with meal planning.</i></p>	<p><b>Theme 1: The staff will always plan a meal around what the clients prefer.</b></p> <p><b>Theme 2: There is inconsistency among Administrators as to what the agency requires them to provide.</b></p> <p><b>Theme 3: Restrictions to diet are important to follow when planning meals.</b></p> <p><i>Theme 4: Administrators must consider the cognitive functioning of clients when decisions about food are made.</i></p>	Theme 1: The cognitive level of the client served is vital in the way the staff plan a meal.
Training Regarding meal planning (TRM) Definition: The training that the staff receive regarding meal preparation.	Theme 1: The staff are required to participate in a basic food handling training; specific nutrition training is required for houses that have residents with dietary restrictions.	<b>Theme 1: There is a lack of training from the agency.</b>	<b>Theme 1: The agency does not provide a formal training for the staff regarding how to provide a healthy meal for the clients.</b>	Theme 1: Houses with special diets receive more training
Money Sources for food purchases (MS) Definition: Where the money is obtained to purchase food for the clients.	Theme 1: There are multiple sources of money for food purchases.	<b>Theme 1: Money for food purchases come from a variety of sources.</b>	<b>Theme 1: The money used for food purchases comes from a variety of sources.</b>	No new themes emerged.
Information about each client (IC) Definition: The information that the staff receive about the clients they serve.	<p>Theme 1: There are different ways in which dietary information is obtained.</p> <p>Theme 2: There are different documents that provide the staff with dietary information.</p> <p>Theme 3: When there is documentation about dietary needs they must be followed.</p>	<p><b>Theme 1: Dietary needs are obtained from a variety of places and documented.</b></p> <p><b>Subtheme 1a: Special dietary instructions must be followed.</b></p>	<b>Theme 1: The staff obtain information about clients in a variety of ways and document it.</b> <p><b>Subtheme 1a: It is imperative that documented dietary instructions be followed.</b></p>	No new themes emerged.
Teaching clients about healthy living (CHL) Definition: The way the clients are taught about how what they eat affects their health.	Theme 1: The DSPs informally teach the clients they serve about healthy eating.	<b>Theme 1: Supervisors have a variety of ways they teach the clients about healthy eating.</b>	<b>Theme 1: The staff casually teach the clients about healthy eating in a variety of ways.</b>	Theme 1: If the client has dietary concerns then they receive more formal training

*(Table continues)*

Code	Themes			
	DSP	Supervisors	Administrators	New
Beliefs about what you feel is a healthy meal for clients (BHM) Definition: The opinion staff have regarding what is healthy for clients to consume.	<b>Theme 1: There are some common beliefs of the types of food that are healthy.</b> <b>Theme 2: DSPs believe portion is important to healthy eating.</b>	<i>Theme 1: Supervisors believe there are certain criteria that must be met for food to be considered part of a healthy diet.</i> Subtheme 1a: There are a variety of foods that are considered healthy. Subtheme 1b: Supervisors' belief about portion size varies.	<b>Theme 1: Administrators have certain criteria they believe will encourage a healthy diet.</b> Subtheme 1a: There are a variety of beliefs about the types of food that are healthy. Subtheme 1b: Administrators believe portion is part of healthy eating. <i>Theme 2: The Administrators believe that the clients should get to choose what is best for them.</i>	Theme 1: Staff can't always provide what they believe to be healthy.
Use of snacks in the agency (US) snacks that are given to the clients between meals.	<b>Theme 1: There are a variety of snacks that are provided for the clients.</b> <b>Theme 2: There are multiple times a snack can be given to a client.</b>	<i>Theme 1: The types of snacks provided are determined a variety of ways.</i> <i>Theme 2: The reason a snack may be given varies.</i>	<b>Theme 1: There are various factors that determine the snacks that are provided.</b> <b>Theme 2: Snacks are given for multiple reasons.</b>	No new themes emerged.

<sup>a</sup>Bolded themes represent similar themes across all three cases. <sup>b</sup>Italicized themes represent different themes <sup>c</sup>Bolded and italicized themes represent themes that are similar among two themes but not all three themes.

Information from the Across-Case Analysis presented in Table 9 was used to answer the RQ for the study. The information is initially presented by code and is followed by a summary that answers the RQ: How do staff members make decisions about the diet they provide for an individual with an intellectual disability?

***Decision making about food.*** There were many similarities across cases for this code but there were also some differences. The staff across all cases reported that providing the clients what they like to eat and not forcing them to eat food they do not like is essential in the care of the clients. The staff will make it a point to know what the clients prefer to eat by formally asking them as well as listening to their requests.

The staff, across all cases, also reported they would consider any dietary restrictions the clients may have before they plan and prepare a meal. Restrictions come

in many forms such as medical or religious. Regardless of the restriction the staff will follow the restricted guidelines.

One difference between cases that emerged for this code was the supervisors' small amount of direct involvement with the dietary decisions. The supervisors reported that they do not have a lot of direct involvement with the preparation and decision making of food unless they are filling in for one of their DSPs.

The food requirements that the agency sets is another area where some differences emerged among cases. The DSP case reported an overall understanding that they are required to provide a meat, starch, and vegetable with every meal. The supervisors did not report any agency requirements. The administrators had a different understanding of the agency's requirements. Two of the administrators reported they are to follow the food pyramid, providing a meat, starch, and vegetable. One administrator reported a generic requirement of a well-rounded meal. Another administrator reported that each house is unique and has different requirements.

Finally, staff members across all three cases reported that the ability a client has in vocalizing their opinion about their food choices significantly impacts the way decisions are made about meals. There are times when the clients that are higher functioning make choices regarding food without any supervision or input from the staff. Staff also reported that teaching the clients to understand nutrition and explaining risks to them can be difficult and can only be done with clients who have a higher cognitive level. Though the cognitive level of a client was reported within each case it was reported more often within the administrator case.

***Training regarding meal planning.*** The staff across all cases reported that the training they receive from the agency is very basic. There is a strong desire from the staff that more specific training be given regarding what specific food items to provide for the clients.

Across the board, staff members reported that staff who work in houses that have a client with a special diet receive more training regarding diet and nutrition. Although staff who work with clients with special needs reported that they received extra training they said that it was not adequate for meeting the needs of some of the clients they served and they wished for additional training pertaining to special dietary restrictions.

***Money sources for food purchase.*** The staff across all cases explained that the agency receives financial support for food purchases from a variety of sources. The two main sources are Link cards for each client, which is provided by the state, and petty cash for each house, which is provided by the agency. There are a few clients who are private pay and they pay cash instead of being provided a Link card. All the sources are divided up by group home. The Link cards and the private pay cash for each client in the house is combined and used to purchase the food for the house. The petty cash is given to the entire house to be used for household purchases. The Link card is the primary source and the petty cash is used to supplement the Link card so the clients are ensured adequate amounts of food and special treats.

***Information about clients.*** Staff members across all cases shared the process in which they obtain dietary information for each client. The majority of information about clients that is provided to staff comes from three primary sources: 1) the clients

themselves through daily verbal communication with staff, 2) the clients' parent/guardian during the intake and daily communication, and/or 3) physician orders that appear in a client's medical records. However, there was one subtle difference among cases which is the supervisors and the administrators described less detail about the sources of information resulting in a subtheme for one of the themes. Though this slight difference appeared the distinction did not alter the overall findings that information regarding dietary needs comes primarily from three sources and is documented on various forms for the staff to utilize.

The staff members also explained that when they are planning a meal they would refer to certain documents to obtain the clients' dietary information. There are various documents that include the clients' dietary needs including ISP, SASSY, and intake forms. Staff members have a strong sense of obligation to follow any dietary instructions that are written on agency documents. The staff will only restrict the client of any food desire if it is documented as a danger to the clients' well-being.

***Teaching clients about healthy eating.*** The staff members across all cases discussed how they find opportunities to teach the clients about making healthy dietary decisions. The staff reported they will teach by using hands on techniques while cooking, selecting foods when grocery shopping, giving examples during group meetings, or they insert information into in casual conversations with clients.

There are opportunities for clients to obtain formal learning of healthy eating through a physician or a nutritionist. The individuals who receive this training must have the cognitive ability to understand the information. Whenever a doctor gives a client a

dietary restriction they will explain to the client the reasons for the restrictions and what it means. In addition, clients are weighed on a regular basis; if there are concerns regarding the weight of the client, the client is given the opportunity to speak with medical personnel regarding their dietary habits.

*Beliefs about what staff feel is a healthy meal for clients.* Staff members across all cases discussed in the interview specific food items as well as ways to prepare food that they believed to be a healthier option to what had been suggested by the agency. There was a subtle difference among cases. The supervisors and the administrators reported less details regarding their beliefs which resulted in portion size and food items to emerge as a subtheme under healthy eating beliefs. The distinction did not alter the overall finding that eating a balanced diet that included fruit and vegetables along with a meat and a starch was important. Frying food was considered unhealthy, with most staff reporting their desire to limit the amount and type of fried foods and instead preparing more baked or boiled items.

The staff across all cases also explained how they tried to encourage healthy eating through portion size. The staff shared multiple ways they do this such as: plate size, sharing treats, and following dietary needs.

One difference that emerged among cases was that administrators reported that even though they believed that clients should be encouraged to eat healthily they also believed in giving their clients some discretion in choosing what they would like to eat. There were staff among all cases who believed that the amount of food that the client consumes should be determined by the client. Staff try to encourage healthy eating.

However, even when staff try to advise clients about healthier options the clients will not always accept it. The administrators reported it is their responsibility to advocate for the rights of the clients and not dictate to them what they should be eating. It is the staff's belief that food is important to the clients and it is one decision that should be made by the clients themselves. Balancing the need to respect what clients want with the beliefs of staff of what was healthy and would benefit the client was an area that was discussed often.

*Use of snacks in the agency.* The staff across all cases shared multiple types of snacks that they provided for their clients. The snacks ranged from fruit and vegetables to sweets such as cookies, cakes, and pies to yogurt with granola. The snacks that are chosen depends on the clients' preference as well as dietary needs.

Staff members across all cases discussed the procedures they use regarding snacks. There is a standard snack time of 4pm and late night which most houses comply with. There are also some houses that are more lenient and allow the clients to decide when they want a snack. Snacks can be given as an incentive to prevent or stop maladaptive behavior as well as can be used for medical reasons such as clients with diabetes to prevent a diabetic coma.

### **Summary**

There are several factors that contribute to how staff members make decisions about the diet they provide for IID. The main factor is the client's rights and freedom of choice with 100% of participants emphasizing this factor when they make decisions regarding the diet they serve for IID. Another factor that contributes to how staff

members make decisions about the diet for IID, though not as prevalent as client's rights, is knowledge. The staff report that training and education is critical but is lacking. There were two factors that contributed to the decisions about diet that showed inconsistencies among the participants. These factors included attitude and food as a reward. The attitude toward providing a healthy meal for IID differed greatly among cases. The DSP and supervisor cases revealed a strong desire to provide healthy items whereas the administrator case revealed a strong desire to allow the clients to choose their food items. Using food as part of a reward system for behavior conditioning was also inconsistent among participants. There were several participants that described how food could be used to alter maladaptive behavior. However, there were also several participants that reported they do not utilize such a system as they do not like how it affects the clients.

Two factors that contributed to how staff members make decisions about the diet they provide for IID emerged from the analysis. These factors included the way IID with special diets play a role in how staff members plan a meal and how the cognitive level of the client will determine how much input the client has on the meal that is provided. The results also showed that there are two factors that are not factors in how staff decide on the meal that is provided: food as a reward and DHS standards and regulations. Though the DHS standards and regulations do not contribute to the staff's decisions about the specific food items that are provided it does affect the client's choice since it is mandated by DHS that the clients have the right to choose.



The results of the analysis for the research question that examined how staff members make decisions of the diet they provide for IID will be further explored in chapter 5. Chapter 5 discusses each of the factors with a comparison of each factor with the previous literature as discussed in chapter 2, a description of areas where further research is needed, an explanation of limitations from this study, evidence of trustworthiness, and how the results can lead to positive social change.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

The purpose of this qualitative case study was to understand how staff members make decisions about the diet they provide for IID. Understanding the contributing factors that influence how staff members make decisions regarding diet will add to what is currently known from research and has the potential to result in changes in how diets are implemented for IID (Maaskant et al., 2009).

Six major factors have been linked to the implementation of a healthy diet program in the residential setting for IID: (a) attitude toward healthy eating (Escalante-Guerrero et al., 2012), (b) resources (Schroder, et al., 2006), (c) standards and regulations imposed by the DHS (Zarcone et al., 1993), (d) IID's rights and freedom of choice (Rimmer & Yamaki, 2006), (e) use of energy-dense food as a reward (Reynolds, Zupanick, & Dombeck, 2011), and (f) knowledge of what a healthy diet entails (Bhaumik et al., 2008). The present study assessed these factors and how they influenced the implementation of a healthy diet in residential agencies for IID.

The findings from the current study revealed that two of these factors were reported by all staff as contributing to how staff members made decisions about the diet they provided for IID. Client's rights, specifically their voice in decisions about meals, and knowledge, the training the staff receive regarding nutrition, were reported by staff at all three levels as influencing what and how meals were prepared for IID. Several other factors emerged during discussions with participants that played a role in decisions about

providing meals for IID. The cognitive level of the IID and the need to satisfy the requirements for preparing meals for IID with special diets surfaced during discussions with staff as important factors for planning and preparing meals. Clients with cognitive impairments and IID who required a strict meal plan received special attention by all staff.

There were three factors that were not universally shared by everyone: staff's attitude toward implementing a healthy diet, resources to provide food, and using food as a reward for behavioral intervention. Staff at distinct levels felt differently about the importance of these factors with those closest to the client reporting the practical side of planning, preparing, and serving meals and what that involves and those in management reporting the administrative side of meal planning with an eye toward budget and adhering to regulations. There was also one factor that contributed to how staff members made decisions in the diet they provided for IID, however not in the way initially thought. The DHS standards and regulations do not contribute directly to the decisions staff members make about the specific food items that are provided to clients but because "client's choice" is mandated by DHS, decisions about food fall under these guidelines. Clients have the right to choose and voice their opinion about what they want to eat.

### **Interpretation of the Findings**

The literature-based factors and the findings from this study are compared in Table 10. The first column reports the findings for each of the six factors from studies reported in Chapter 2's review of the research. The column labeled *Confirm* reports the findings in the present study that were consistent with what researchers found in their

studies. The column labeled *Disconfirm* reports the views reported by participants in the study that were not entirely consistent with what was reported in the research. The differences are explained. The final column labeled *Extends Knowledge* reports what was learned in this study that enhances our understanding and that goes beyond what earlier researchers reported. This column also captures what participants reported as needing.

Table 10

*Comparison of findings from literature and Shelton Study*

Findings from Literature	Findings from Shelton Study		
	Confirm	Disconfirm	Extends Knowledge
<b>Attitude:</b> The correlation between the desire to change food habits and action was significant (Escalante-Guerrero et al., 2012)	The participants who believe they should provide a healthy diet for IID provided healthier items than the participants who believe IID should choose their own food.		
The attitude of leadership effects how the subordinates implement the directives from leadership (Oreg & Benson, 2011)	DSPs follow what leadership state is required.		
<b>Knowledge:</b> Many care givers lack the knowledge of what a healthy diet entails and risks of obesity. They lack the education needed to improve the lifestyle of IID. (Bhaumik et al., 2008).	Most participants agreed that the agency does not provide adequate nutritional training.		
Education is effective in reducing negative consumption behaviors (Pettigrew et al., 2015)			Participants reported that they needed to receive additional training when working with a client who has special dietary needs.
<b>Standards and Regulations:</b> Agencies do not follow DHS standards 100% (Zarcone et al., 1993)		Participants follow DHS standards and regulations regarding the client's right to choose.  Note: Other areas of regulations were not identified	
<b>Food as a Reward:</b> Having food as a reward initiates several negative consequences including contributing to poor health and eating habits, encouraging overconsumption of unhealthy foods, and increasing preference for sweets and other energy-dense foods (USDA, 2004).		Food as a reward is not a contributing factor to healthy diet implementation with only 4 participants reporting the use of food as a reward, 2 participants acknowledging it is done but not in their homes, and 6 participants not mentioning it at all	
Food is a helpful tool to alter negative behaviors (Brown et al., 2011)	The agency does use food as a reward to alter maladaptive behavior,		

*(Table Continues)*

Findings from Literature	Findings from Shelton Study		
	Confirm	Disconfirm	Extends Knowledge
<p><b>Clients' Rights</b> A problem faced by many service providers is providing the freedom for IID as well as promote a healthy lifestyle. (Rimmer &amp; Yamaki, 2006)</p> <p>Those with higher levels of functioning have the freedom to live as they like which may lead to less physical activity and poor dietary choices. (Ito, 2006)</p>	<p>With direction from federal and state policies, medical directives, and guidance from the staff, the views of clients are woven into the decision about the meals that are served.</p> <p>IID with a higher cognitive level will have more input in the meals that are prepared whereas IID with a lower cognitive level will be dependent upon the staff's discretion of what food should be prepared.</p>	<p>The staff will restrict a client's diet if the client has a special dietary need.</p> <p>Participants were unaware of what a Mediterranean diet is, so cost was not a factor</p>	<p>With the resources that are available the participants reported that they used their knowledge about food to provide a healthy diet.</p>
<p><b>Resources:</b> Higher adherence to the Mediterranean Diet was correlated to higher increase of dietary costs. (Schroder, Marrugat, &amp; Covas, 2006) Cost is a barrier to healthy eating as it is more expensive to consume healthy foods (Morris et al., 2014)</p>	<p>The Supervisor and Administrator cases were conscious of the budget having to watch closely what money is spent on.</p>	<p>Within the DSP case staff reported that there were adequate resources for providing healthy meals to clients. DSP were creative and relied on their beliefs about what was healthy in terms of servings and food preparation.</p>	

The TPB was used as a framework for the present study. Table 11 displays the findings from the current study within the context of TPB. The first column describes the three factors, according to TPB, that determine intentions to engage in a behavior - attitude, subjective norm, and perceived behavioral control. The six factors that have been shown through previous literature to contribute to healthy diet implementation have been included within one of the three factors of TPB. The second column describes the findings from the current study that correspond with the TPB framework.

Table 11

*Findings Within TPB Framework*

Theory of Planned Behavior	Findings
Attitude	
<p>Attitude toward healthy eating (The way that the staff implement diet for IID based on their beliefs of what is important)</p>	<p>There were some staff who wanted to provide the best nutrition possible for the clients to enhance their quality of life and there were other staff who wanted the IID to make their own food choice to enhance their quality of life. <i>I feel like they should eat whatever they want to eat.</i> (Tina) <i>I'm a firm believer in no frying so we do a lot of meals in the crockpot and baking [and] a lot of grilling.</i> (Dan)</p>
<p>Knowledge or training the participants receive (The way that the staff implement diet for IID based on the knowledge they have)</p>	<p>Staff reported that the training they received was not adequate to cover all the situations they faced. They used their personal knowledge but when faced with special needs they wanted further training. <i>But most of [the clients] don't have [special] diets so we just go [with] what we think is healthy for them and what they try to choose for themselves.</i> (Faye)</p>
Subjective Norm	
<p>DHS Standards and Regulations (The way the staff implement diet for IID based on the Standards and Regulations of DHS)</p>	<p>DHS standards are not specific about the types of food to provide; however, they do state the importance of the client's right to choose. <i>When [the staff] first enter the agency, they do [receive some basic nutritional training from DHS]</i> (Irene)</p>
<p>Food as a Reward (The way that using food as a behavioral incentive could affect the diet implementation)</p>	<p>Food is sometimes used as a reward, but not all participants agree with that procedure or use it. Food as a reward does not affect diet implementation. <i>I've had participants who have had [food] as a behavioral [incentive] and I didn't like it because I didn't think that that should be an incentive.</i> (Cara) <i>[We] have some [clients] who are on [a] behavior plan where [they] clean [their] room and do everything [they are] supposed to do [they] get an extra snack. [Individuals with a special diet will get a snack that does not affect their dietary restrictions]</i> (Lisa)</p>
Perceived Behavior Control	
<p>Client's Rights (The way the staff implement diet based on the client's right to choose)</p>	<p>The first consideration when deciding on a meal to prepare is the clients' likes and dislikes. <i>[The food we prepare] is all based on the likes of the individuals in the home.</i> (Dan)</p>
<p>Resources (The way that the resources to provide food affect the diet implemented to IID)</p>	<p>There are several resources available to purchase food. There is a difference in opinion if it is enough to provide what is needed. DSPs stated [the amount of money received] is enough [to provide the food that is needed] but Supervisors and Administrators both are conscious of the budget. <i>Petty cash, link cards, they are always [going to] have food.</i> (Jane) <i>[When trying to decide what to purchase for food] we hear different things about budget and [food is] not affordable.</i> (Cara)</p>



### **Limitations of the Study**

The use of a qualitative interview study always assumes possible limitations. The setting where the study took place is one potential limitation. This study took place in one agency in the Midwest region and included the staff from the agency. It is possible that different findings could have emerged with an agency located in different regions of the United States. An interview study also carries with it the potential for researcher bias. This limitation was handled by having the RQ and interview questions reviewed by the coordinator of the health psychology program and my committee. Final approval came from Walden's IRB. To offset the possibility of my beliefs affecting the design and conduct of the study I identified my biases upfront and bracketed them as I developed the research design and checked them at the end when I analyzed the data.

Another potential limitation to the study concerned using participants with different jobs and responsibilities. Participants in different roles may not articulate and perceive information at the same level. To accommodate differences among participants, the interview protocol was tailored to each group; depending on the responses to interview questions some groups were asked additional questions. The interview questions were practiced with a heterogeneous group of a few individuals to identify any issues.

### **Recommendations**

The limitations to the study bring to light some recommendations for further studies.

**Agency Setting**

It is recommended that staff in agencies that serve the IID population from other states, as well as other regions, be interviewed to understand how decisions regarding meals provided for IID are determined.

**Job Responsibility**

There is also the possibility that agencies in different areas may have different job responsibilities for their staff. Understanding these differences could help determine the role that each one plays in the decision making process.

There are also three factors that are recommended for further research: knowledge, cognitive level, and DHS standards and regulations.

**Knowledge**

Further studies could focus on how knowledge about how to prepare a nutritional diet contributes to how staff members make decisions on the meals that are provided for IID. Participants in this study used their personal knowledge and understanding about healthy diets in their group activities with clients, purchase of food, and the preparation of food, and expressed that they wanted to acquire more information about specific food items that are nutritious and how to prepare them for IID with special dietary restrictions. Researchers have noted in their studies that knowledge is a factor in implementing a healthy diet (Bhaumik et al., 2008). A study that examines the difference between staff who are trained with healthy eating and staff who are not trained would further expand on the effect that the knowledge factor has on making decisions regarding healthy diet.

### **Cognitive Level of IID**

As the cognitive level of IID emerged as a contributing factor with how staff decided about the meals they provided for IID, more research should be focused on the specific affect that the cognitive level of IID has on how staff members decide on the meal provided.

### **DHS Standards and Regulations**

Though the DHS standards and regulations do not contribute to the staff's decisions about the specific food items that are provided it does affect the client's choice since it is mandated by DHS that the clients have the right to choose. Further information needs to be gathered to understand the criteria that an agency needs to meet to follow DHS regulation of the client's right to choose. Does the client have the right to choose from any food item or is it the agency's responsibility to provide healthy choices and the client's right to choose is fulfilled by choosing from a select healthy food item list?

### **Recommendations for Practice**

The IID agency can instill positive social change by using the information gathered to develop an intervention plan that will lead to the implementation of a healthy diet for the IID they serve. There are two primary recommendations that can be taken from this study including education and client's right to choose.

First, education and training regarding a healthy diet should be emphasized more within the agency. The agency, as a whole, should provide all staff members quality training that can guide the staff in decision making regarding healthy eating habits. The training should be for all staff members and not just the staff members who work with

IID who have special dietary needs. By providing this instruction it would help the staff understand the basics of healthy eating for those who are on a general diet in hopes to prevent them from sustaining a medical condition such as diabetes or hypertension which will then require them to have a special diet. In addition to training the staff there should also be formal training set in place for IID to learn about healthy living.

The second recommendation that could enhance the implementation of healthy eating among IID is to provide healthier choices in the homes. As it is the right for clients to choose their food and to eat what they enjoy it is also the responsibility of the agency to provide a safe environment for the clients. Having healthy food items in the homes for the clients to choose from is still ensuring they can activate their rights without the options of unhealthy food. This would also go along with educating the clients about healthy eating as the staff can discuss with the clients the choices that are being made.

### **Evidence of Trustworthiness**

I completed a descriptive audit trail so readers can clearly see where the findings came from.

### **Credibility**

Triangulation is a technique that facilitates validation of data through cross comparison from two or more sources (Patton, 1990). For this study there were three groups of personnel interviewed. Each group had four participants. Data from the interviews within each group was cross-checked. In addition, the consistency of data was examined by comparing the data from participants with different viewpoints (roles) within the agency. Both methods of triangulation are considered *triangulation of sources*

(Patton, 1990). This type of triangulation provided an all-inclusive understanding of the influences that guide the staff's decision in the diet that is implemented and provide credibility to the study findings.

### **Transferability**

The use of thick description was applied to the present study to establish transferability. The transferability of the results from this study to encompass all agencies for IID is small since no two agencies are alike. However, the present study can establish a foundation for all agencies to examine the influence on diet implementation. The influences that guide the staff's decision of the diet that is implemented was described in extensive details that conclusions were formed that can be transferred to other settings and situations with similar contexts.

### **Confirmability**

For the present study reflexivity will be used to establish confirmability. The use of a reflexive journal as proposed by Lincoln and Guba (1985) was utilized to eliminate any researcher biases shaping the findings of the study. I documented the process of the study development by noting methodological decisions along with the reasons behind them, the logistics of the study, and details of the personal values and interests happening at each stage of the study development.

### **Conclusion**

Diet plays a major role in the overall well-being of an IID. As the agency does have the responsibility to acknowledge and ensure that the rights of the clients they serve are respected they also have the responsibility to provide a safe and nurturing

environment that stimulates growth and happiness. As the diet that one consumes can affect both the physical and mental health of an individual, it is crucial that the staff that is in place to care for IID should be provided with every possible means to provide a healthy diet for those they serve. Staff members have the desire to provide the clients they serve with the best quality of life as possible. With this desire they should be given the tools necessary to make the best dietary decisions needed. These tools should include proper dietary training and education as well as the ability to redirect client's food choices when the choices are excessively against a healthy dietary plan.

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## Appendix A: Interview Protocol

RQ: How do staff members make decisions about the diet they provide for an individual with an intellectual disability?

**Question 1a:**

I would like to begin our conversation by talking about the meal menus that are developed for the clients at this agency.

How are meal menus for the clients at this agency determined? (Prompt: who is involved in decisions; how are decisions made; are meal menus developed for an entire group of individuals or done for each individual?)

**Question 1b:**

What kinds of training do you receive for planning a meal menu for clients?

**Question 1c:**

What is your role in the decisions that are made? (Prompt: what do you do in your role? Is the role pre-determined and established in policies or guidelines?)

**Question 1d:**

What resources are available for providing food to clients?

If participants can identify resources, ask:

How are the resources used?

**ASK #2 SERIES OF QUESTIONS ONLY IF PERSON HAS A DIRECT ROLE IN PLANNING MEAL MENU:**

**Question 2a:**

In planning the meal menus for clients, what kinds of information does the agency have about each client regarding the kinds of food that should be part of their meal menu? (Prompt: health issues; physical issues; cognitive issues; religious/cultural issues?)

**Question 2b:**

How do you use this information in planning the meal menu? (Prompt: health issues; physical issues; cognitive issues; religious/cultural issues?)

**Question 2c:**

Could you give me an example of how you incorporate the information the agency has about its clients when planning a meal menu for a client or group of clients? (Prompt: what would a meal menu look like for clients with different issues)

**ASK #3 SERIES OF QUESTIONS OF ALL PARTICIPANTS**

**Question 3a:**

Now I would like to talk with you about the role of clients in deciding what they will be served at a meal.

In what ways do clients share what they would like to eat at a meal? (Prompt: how clients make their desires/interests known)

**Question 3b:**

How are clients' interests and desires in what they eat accommodated at the agency?

**Question 3c:**

How do clients obtain an understanding of how what they eat affects their health?

**ASK #4 SERIES OF QUESTIONS OF ALL PARTICIPANTS**

**Question 4a:**

Now I would like to talk with you about your beliefs about what is important in the meals for clients, what you feel would be a healthy meal for clients based on their needs. We all have beliefs about the kinds of food that we feel are important for people to eat, how the food should be prepared, and how much a person should be served.

Can you share what you feel is important to be included with each meal served to a client. (Prompt: food choices; size of serving; preparation of food)

**Question 4b:**

In what ways are you able to incorporate your beliefs about what is important in the meals that are served to clients? (Prompt: food choices; serving size; preparation of food).

**If a participant says she/he is able to incorporate her/his beliefs about what should be included in a meal, ask #4C AND 4D:**

**Question 4c:**

Could you give me an example of a meal that includes your beliefs about a healthy diet?

**Question 4d:**

What kinds of changes to a person's meal would you be making to include your beliefs about a healthy diet?

**ASK #5 SERIES OF QUESTIONS OF ALL PARTICIPANTS**

**Question 5a:**

There may be times during the day when snacks are given to clients as part of the daily meal menu or when snacks are used for behavior reasons such as rewards for certain behavior.

Could you share if snacks are used in this agency and how they are used during the day (Prompt: regular part of meal menu; used as rewards for behavior).

**ASK #5B, #5C, AND #5D IF SNACKS ARE USED IN ANY CAPACITY**

**Question 5B:**

Who determines what the snack is for each client (Prompt: are the snacks the same for each client; how decisions about snacks are made)

**Question 5c:**

How and when are snacks used? (Prompt: rewards)

**Question 5d:**

Could you give an example of a snack that might be used in your agency with a client?

**Closing:**

Thank you for taking the time to talk with me and share your experience with the meals served at this agency. Is there any additional information about the meals that clients receive that you would like to share?

## Appendix B: Letter of Cooperation

{Name}  
{Title}  
{Name of Organization}  
{Address}

{Date}

Dear Stephanie Shelton,

Based on my review of your research proposal, I give permission for you to conduct the study entitled *Implementing a Healthy Diet in the Intellectual Disability Residential Community* within the {Name of Agency}. As part of this study, I authorize you to recruit participants by posting the approved flyer throughout the agency, conduct a 45-minute interview with qualified participants at the agency if a participant wishes to do this (before or after work hours), and disseminate the results to the agency with a presentation to all management and participants. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization reserves the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically. Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. Walden University staff verify any electronic signatures that do not originate from a password-protected source (i.e., an email address officially on file with Walden).

## Appendix C: Flyer

A RESEARCH STUDY ON THE INFLUENCES OF THE MEALS SERVED TO  
CLIENTS WITH AN INTELLECTUAL DISABILITYVOLUNTEERS NEEDED FOR PARTICIPATION IN A RESEARCH  
STUDY

My name is Stephanie Shelton and I am a doctoral student at Walden University. I am planning a study on the influences that guide the staff's decisions of the meals that are prepared and served to individuals with an intellectual disability (IID) in a residential setting. Interviews will be conducted with three levels of staff (Direct Support Professionals, Supervisors, and Administrators).

If you are interested in participating and meet the following criteria for participating, please contact me.

You work at a residential agency for IID as either an administrator, supervisor, or direct support provider,

You have worked in this setting for a minimum of 6 months, and

You are involved in making some decisions about the food clients with IID are served.

Your participation would involve one 45-minute interview. Here are some examples of questions I will be asking:

1. How are meals for the clients at this agency determined?
2. What kinds of training do you receive for planning a meal for clients?

In appreciation for your time, you will receive a \$20 Gift Card

For more information about this study, or to volunteer for this study, please contact:

Stephanie Shelton, researcher

## Appendix D: Screening Tool

1. How long have you been employed in a Residential Agency that provides care for Individuals with an Intellectual Disability?
2. What position(s) have you held while employed in such an agency? For how long with each position?
3. In what aspect have you been involved with the diet implementation of the individuals you serve?

## Appendix E: Contact Letter

{Date}

{Name}

{Title}

{Name of Organization}

{Address of Organization}

Dear {Name}:

My name is Stephanie Shelton and I am currently pursuing my PhD in Health Psychology at Walden University. I am planning a study for my dissertation that focuses on the meals prepared and served to individuals with an intellectual disability living in a residential setting. My study involves interviewing 12 employees of a residential agency across three levels within an agency and will include four direct support professionals, four supervisors, and four administrators. The interview questions address the influences that guide the decisions made by these groups of individuals. I will be glad to share a draft of my interview protocol with you. All of the information shared during interviews will remain confidential without the name of the agency, its location, or the names of the participants. I will share the results of the study with you and the participants by emailing a two-page summary of the findings.

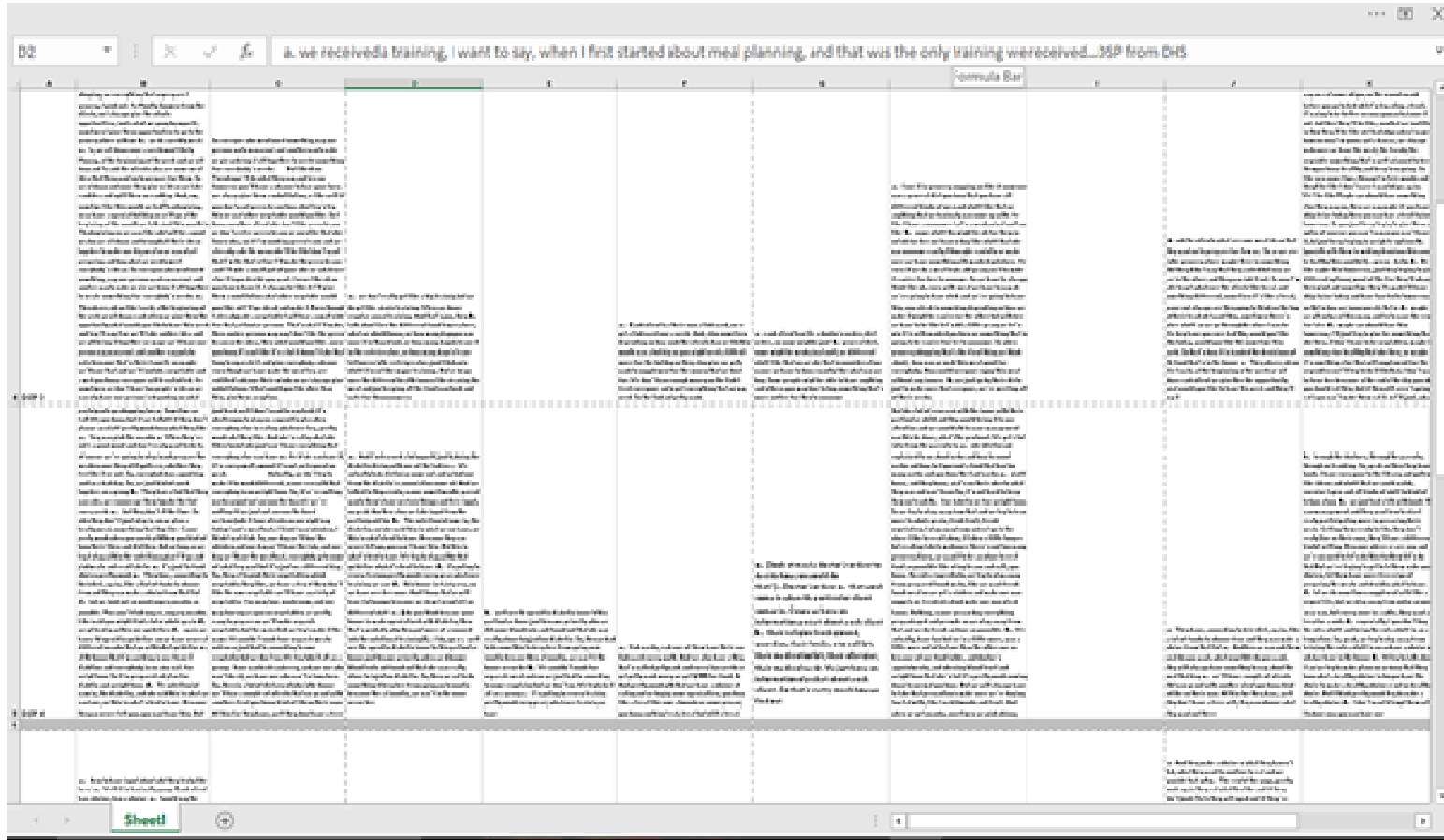
Enclosed is a sample of the flyer I would like to post at the agency to recruit the volunteer participants. As part of my recruitment I am giving interested participants opportunity to choose if they would prefer a face-to-face interview or a phone interview. I would like to use a private room in your agency to conduct interviews if a person selects doing a face-to-face interview. All interviews would be conducted before or after the work hours of participants. Each interview will be approximately 45 minutes. I may also conduct a 10-minute interview after the data have been analyzed to verify the results of each interview with each participant. All participation in the study is voluntary and participants, as well as the agency, can withdraw at any time.

I am aware that some agencies have their own ethics review board or a set of requirements for conducting studies with agency personnel and I want to accommodate these requirements. My dissertation chair will ensure that I am following the ethics requirements prescribed by Walden University. I would like to schedule a phone call with you to go over the study and the requirements for conducting a study in your agency and meet with you if you would like to go over the study in person. If there is an individual within the agency I should talk with in addition to you I will look forward to scheduling an appointment with that person.

Sincerely,

Stephanie Shelton

# Appendix F: Data Spreadsheet Example





## Appendix G: Example of Participant's Direct Quotes

Name of code: Decision Making About Food

Definition of code: The way decisions are made regarding food and meal planning

**Direct Support Professional****Theme 1: The staff will always plan a meal around the clients' likes and dislikes**

DSP 1:

- It is predetermined that they do need vegetables and that they do need to eat a healthy meal. It's also been told to me that it is their right to refuse or to eat what they want to eat so therefore we exercise their right and we do put it on their plate but if they don't want to eat it we don't force them at all.
- We give him choices of what he wants out and then we will go get it and bring it back and he eats his here with staff and the other clients go out.
- So, what I do is I take a look at the cabinets and see what we are low on, I ask the individuals what they would prefer because I am going shopping
- Clients mostly tell us what they want to eat.
- Because they're young men they literally tell us we want pizza and so that it where we are headed. So, they're very verbal. They're very verbal, very verbal.
- or he'll point; he will stand here and point to the kitchen and we will tell him come get it. And he will come in and get a yogurt or a banana. He will just open the refrigerator and get it and he'll go about his business. He can tell us what he wants

## Appendix H: DHS Guidelines

The complete DHS Rights of Individuals form can be viewed at:

<http://www.dhs.state.il.us/onenetlibrary/12/documents/Forms/IL462-1201.pdf>

Medicaid Home and Community-Based Services Developmental Disability Waivers  
The following is a list of some of your rights under the Illinois Mental Health and Developmental Disabilities Code and other laws.

- **Retention of Rights:** You maintain all of your legal and civil rights while receiving services.
- **Non-Discrimination:** You have a right to be treated fairly without regard to your sex, race, religion, ethnic background, handicapping condition, national origin, age or financial standing.
- **Selection of Providers:** You have the right to choose your own providers and change providers if necessary. You should contact your Independent Service Coordination agency (ISC) for assistance with this. You have the right to know if the service provider is not meeting quality standards and to look at written review and survey reports describing the quality of the services. Review and survey results are posted on the Department's website for your information. Summary data about allegations of abuse, neglect, and exploitation is posted there as well. Information about allegations at specific sites is available upon request from your ISC agency.
- **Humane Care and Services Plan:** You have a right to adequate and humane care, services in the least restrictive environment and an individual service plan. You have the right to participate in the development of your own individualized service plan.
- **Abuse or Neglect:** You have the right to be free from physical, sexual and mental abuse or neglect. If you think someone has treated you badly, or has taken advantage of you, you should tell someone you trust so that the problem can be resolved. Any incidents of abuse or neglect shall be reported to the appropriate agency listed on page 3 for "Filing A Complaint."
- **Exploitation:** You have the right to be free from exploitation of your property or finances. If you think someone has taken advantage of you, you should tell someone you trust so that the problem can be resolved. Any incidents of exploitation shall be reported to the appropriate agency listed on page 3 for "Filing A Complaint."
- **Coercion:** You have the right to be free from coercion. You have the right to be free from others pressuring you to do something by using force or threat.
- **Restraints:** Restraints may be used only to protect you from physically harming yourself or others, or as a part of a medical/surgical procedure, and only under the supervision of a properly qualified professional.
- **Seclusion:** The use of seclusion is not permitted.

- **Confidentiality:** Personal information about you and the services you receive is private and may be shared with someone else only if allowed by the Illinois Mental Health and Developmental Disabilities Confidentiality Act, and, if applicable, by the federal Health Insurance Portability and Accountability Act.
- **Mail/Phone Calls/Visits:** You have the right to communicate with other people in private, without obstruction or censorship by the staff. Communication by these means may be reasonably restricted, but only to protect you or others from harm, harassment, or intimidation.
- **Property:** You have the right to receive, possess, and use personal property unless it is determined that certain items are harmful to you or others. When you stop receiving services from an agency, all lawful property must be returned to you.
- **Money:** You may use your money as you choose, unless you are prohibited from doing so under a court guardianship order.
- **Banking:** You may deposit your money at a bank or place it for safe-keeping with the service provider. If the service provide deposits your money, any interest earned will be yours. Neither this service provider nor any of its employees may act as payee to receive any assistance directed to you, including Social Security and pension, annuity, or trust fund payments without the informed consent of you or your guardian.
- **Labor:** You must be paid for work you are asked to perform which benefits the service provider; however, you may be required to do personal housekeeping chores without being paid.
- **Refusing Services:** You or your guardian (on your behalf) have the right to refuse services, including medication. In general, when services are refused, they will not be given to you. However, they may be provided even if you refuse if there is a medical or other emergency or if a judge orders it.
- **Medical or Dental Services:** Except in an emergency, no medical or dental services will be provided to you without the informed consent of you or your guardian. You have the right to purchase and use the services of private physicians and other professionals of your choice. Your choice shall be documented in your service plan.
- **Meetings:** You have a right to participate in any team meeting about you.
- **Discharge:** You have a right to continue to receive services unless you voluntarily withdraw or you meet the criteria for discharge from the services. You have the right to terminate services at any time.
- **Grievances:** You have a right to express grievances in writing to the chief of the agency providing your services. Some decisions by the agency (denial, reduction, suspension, termination of services) are appealable to the Department of Human Services and to the Department of Healthcare and Family Services.
- **Clinical Record:** You have a right to look at your clinical record and other information about you.
- **Exercising Your Rights:** You shall not be denied, suspended from or terminated from services or have services reduced for filing a grievance or for exercising any of your rights. See Form IL462-1202 for Your Right to Appeal.

- **Restriction of Rights:** If your rights are restricted, the person who is responsible for your services must tell you, your parents if you are under age eighteen, and your guardian if one has been appointed. In addition, the service provider must tell all persons or agencies that you choose to have told about the restriction. Justification for any restriction of your individual rights shall be documented in your individual record.
- **Reporting:** You have a right to report any infringements of your rights to the human rights committee at your agency, the Independent Service Coordination agencies, the Department of Human Services, the Illinois Guardianship and Advocacy Commission, or to Equip for Equality. You also have the right to report any complaints or allegations of abuse, neglect, or exploitation as outlined below.