

1-1-2011

# For wanting of a meal: An exploratory study of meal provisions at medium to large college and university food services in Illinois

Evan J. McWhirter

*Eastern Illinois University*

This research is a product of the graduate program in [Counseling and Student Development](#) at Eastern Illinois University. [Find out more](#) about the program.

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## Recommended Citation

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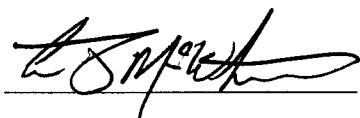
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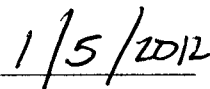
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For Wanting of a Meal: An Exploratory Study of Meal Provisions  
at Medium to Large College and University Food Services in Illinois

(TITLE)

BY

Evan J. McWhirter

**THESIS**

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF

Master of Science in College Student Affairs

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY  
CHARLESTON, ILLINOIS

Fall, 2011

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**Abstract**

This cross-sectional analysis of vegetarian provisions in medium to large college and university food services was developed to facilitate more inclusive institutional food services in higher education. The primary investigator interviewed eight college and university food service directors for the purposes of the study. The overarching theme emerging from the study was that food services are amenable to change current food provisions as long as the students voice their opinions and eat the food thus prepared.

### **Acknowledgements**

There are many people that I need to acknowledge that helped me to complete my thesis. First, I need to express my appreciation for my wife. She was always encouraging and inspiring me to finish my thesis. I would like to thank Dr. Eberly, who served as my program and thesis advisor, for being a great mentor. His advice has proved to be invaluable. I wish to thank the other members of my thesis committee and my departmental professors for giving me the advice that I needed to succeed. Lastly, I need to thank my parents for always encouraging my personal academic goals.

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## CHAPTER I

### Introduction

“Food is what you need to sustain life every day. Food is fuel. You can’t run a tractor without fuel, and you can’t run a human being without it either. Food is the absolute beginning.”

~Dwayne Andreas, former chairman,  
Archer Daniels Midland

In Abraham Maslow’s Hierarchy of Needs, before a person can function properly and advance on the hierarchy of needs, the basic needs must first be obtained. Maslow identifies that the basic needs are all physiological in nature. At the core of the physiological needs, food and shelter are primary. From the founding of Harvard College in 1636 to the present, colleges and universities in the United States of America provide both of these essential needs to all students of higher education. School expenses of room and board fees have existed as long as tuition. In the progression of higher education, housing and dining has typically evolved to meet the needs of students.

The evolution of college and university housing and dining services has greatly changed over the years. When the first dormitories were built, the rooms were typically an open room filled with bunk beds, and the dining facilities were in another part of the living facility or in another building. Students were allowed to keep all of their belongings in a trunk. Typical food for average people in early American culture was served. An average meal would consist of bread, pottage (gruel from ground beans or soup with vegetables and perhaps a little meat), fruit, berries & nuts (in season) and wine (Olver, 2010). Some of the food that was served was so terrible it incited the first student riot at Harvard College in 1766 (Wallechinsky & Wallace, 1975). All students involved in the incident were dismissed from Harvard.

As time progressed, the residence hall rooms began to become smaller and more privatized. The rooms eventually became what is the standard collegiate residence hall rooms that consists of two beds, two desks, and two dressers. When the residence hall rooms changed, the food service made minimal changes to the operation. However, food choices changed greatly with the advent of modern transportation and access to various foods. After World War II and the exponential growth of higher education, food services on campuses expanded and transformed operational procedures for these new students.

Out of this rapid change in higher education in the United States, housing and dining developed into the classic collegiate experience that has persisted until the last ten years. During the past ten years, students began demanding more housing and dining options. These millennial students are expecting to come to their college or university and find the same comforts as they are accustomed at their parents' house. Some of these requests include complete wireless internet, private bathrooms, swimming pools, and full-service food operations available at all times (Bonner, Marbley & Howard-Hamilton, 2011). Most colleges and universities are hesitant to install such facilities due to the large initial cost of building or changing their current facilities or offerings. These expenses are passed on to the students, making the expense out of reach for some.

In addition, there are some universities that are beginning to develop programs that implement the idea of the holistic student. This means that institutions want students to develop in all areas, and one of these areas of development for students is the development of social skills in the community setting (Kuh, Kinzie, Schuh & Whitt, 2010). Developing community skills is a critical part for students to develop if they are to function effectively in society today.

### **Reflective Statement**

All students have unique challenges or situations that may arise during their time spent in higher education. This reality becomes evident when working with international students; it is also one of the bases for this research. One day, an international student came into the International Students and Scholars Office to discuss with his international student adviser the lack of on-campus dietary options. The student was unable to meet the needs of his strict vegetarian diet in the on-campus dining facilities. The university requires all freshmen to live in the residence halls for the duration of their freshman year. Also the university ties the cost of meals to the cost of housing. This forces all students to choose a meal plan. After reviewing the university's current menu, the adviser and researcher explored the options for the student, finding little to no meal options for this student's dietary needs.

Therefore, since it appeared that there was no regular vegetarian entrée for students, the adviser and researcher began to compile options to help this student. The primary solution required the student to cook his own meals. There were facilities available for the student to cook; however, doing so did not solve the problem that this student was required to pay for meals that failed to comply with his dietary requirements.

This led the international student adviser and the researcher to arrange a meeting with the office of housing and dining. Since the best way to solve a problem is to start at the bottom and work one's way up, the researcher called several of the different residence halls' dining services on-campus to see if they could change their food options to suit the student. This yielded minimal results, because the directors of the dining halls said that

unless they would receive other foods to cook, they could not provide a strict or regular vegetarian meal. Changes in the food that is ordered must be approved by the director of all dining services. Also, they stated that the best option for a vegetarian to ensure that there was no meat or animal byproducts in the food was for the student to eat a salad. The international student adviser set up meetings with the student and university officials to discuss on-campus food choices.

The meetings involved the student, director of housing and dining, director of dining services, and the international student adviser. The meetings were very productive in assessing that there were not very many provisions for students who were vegetarians. Throughout the course of these meetings, a plan was discussed particularly for the student to get balanced meals every day. The student would have to eat salad for some meals, but in coordination with one of the food service halls, this particular food service would attempt to provide hot, vegetarian meals for the student. Also, the student would be refunded an amount determined by the university director of housing and dining for the meals that the student did not eat prior to the meeting. However, when the plan was implemented, the student stated that the meals were ill-prepared and tasted so horrible that the student never wanted to try the institution's vegetarian meals again. By this time, it was the end of the semester, and out of frustration the student transferred from the school to a different school that allowed him to live off-campus where the student could cook his own meals.

### **Purpose of the Study**

The purpose of the present study was to research medium to large Illinois institutions' current vegetarian provisions as well as research the procedure that students

must take find appropriate meals at each institution. The loss of one student in the big picture of a medium to large college or university as a whole is not a major loss, but it is a poor reflection of the institution and displays several problem areas. In this particular situation, the staff of the university tried their best to accommodate the student's needs as best as they could with the resources available at the time. In the end, this student probably made up his mind that he was transferring out of the university prior to trying the meal that the food service had provided for him because of the hassle it took to get a meal. This is a major part of why the student left and a major problem for institutions. If a few good students transfer out of a university every year because of a lack of food options on-campus, then the food service operation needs to change. The second problem is if one student has a bad experience, that student will tell his friends and family, and because of the single event, it could possibly damage the reputation of the institution as well as the chances of gaining future students from that student's local community. Therefore, there is a high probability that a great number of students will choose another institution instead of just losing one student. For that reason, student services are important for each individual student as well as important to the research at hand.

This situation led to the International Education Committee on campus to inquire into the international students' opinions about the campus and their satisfaction of the university's services. To summarize the findings about the students' opinions about the availability of food, most of the students felt like there was nothing for them to eat on-campus and nowhere locally to purchase the necessary items to cook. This evolving situation sparked the researcher's interest in doing the present study.

## CHAPTER II

### Literature Review

There is extensive research on vegetarianism and how a person can become a vegetarian; however, the research on vegetarianism at colleges and universities is very limited. The research available mainly addresses a few distinct questions. The first issue is the on-going debate whether vegetarianism is a fad that appears only during certain times in history or an on-going movement that has lasted for centuries. The second topic addresses the question of why do people change to a vegetarian diet? Third, there is research on how to create and maintain a healthy vegetarian diet. The last section is dedicated to the research currently done on vegetarianism in higher education.

#### Movement or Fad

To address the issue of fad or movement, the history of vegetarianism must be scrutinized. The history of the vegetarian movement is very difficult to establish, since the exact time when vegetarianism or limiting the meat in one's diet was first suggested is unknown. Vegetarianism as a dietary practice, however, was directly influenced by both religious fiat and social and political leaders. These factors culminate in the argument over whether vegetarianism is a movement or fad.

The most comprehensive history of vegetarianism to date is *The Bloodless Revolution* (Stuart, 2007). Stuart suggested vegetarianism was first addressed during the writing of the *Bible* when "God said to Adam and Eve... 'Behold, I have given to you every herb bearing seed...and every tree, in which is the fruit of a tree yielding seed; to you it shall be for meat.'" (Genesis 1:29). A controversy arose between early biblical scholars because another Biblical passage states that God gave man dominion over all

animals (Genesis 1:28). The date of the writing of this passage is not known because the stories in Genesis were oral traditions passed down from generation to generation; however, most scholars estimate the date to be around 1440 B.C. While the Biblical account could be interpreted as supporting the practice of vegetarianism, there is no record of anyone adopting vegetarianism, but there were select foods, such as pork, that were forbidden from the Hebrew diet.

The possible first real movement for vegetarianism began in India before the writing of the Adam and Eve story. It was not until these eastern civilizations were 'discovered' by European explorers and traders that they were documented by western scholars. In India at the time of their "discovery", most Indians were Hindus and Hinduism is tied directly to vegetarianism because of the dogma of *himsa*. One of the major principles of Hinduism is that a devoted person is not to perform any kind of *himsa*, which is defined as violence in any kind towards the fellow man or animals (Dandekar, 1979). Thus, vegetarianism was historically rooted in Indian culture through its tie to religion.

Vegetarianism never gained any momentum in Western culture until about the late Eighteenth to early Nineteenth Century. One of the major reasons the vegetarian movement never gained momentum was due to the expense involved in eating fruits, grains and vegetables (Maurer, 2002). During most of this time, there was a deep disparity between rich and poor, and it was not until the industrial revolution that the gap in economic status began to change. Stewart (2007) provided many examples of people and leaders, primarily from England and France, who were vegetarians that advocated that a vegetarian diet should be implemented in their society. But none of these leaders'

initiatives resulted in a sustainable movement lasting longer than one or two generations.

The formation of the American arm of the Vegetarian Society in 1807 by Reverend Cowherd began the vegetarian movement in America (Iacobbo & Iacobbo, 2004). This society was not funded, had little leadership, and did not produce any publications. It was not until after several other vegetarian reform societies in London, around 1875, had some success that the Vegetarian Society began to change people's minds on the subject. This occurred because the Vegetarian Society in America started to adopt many of the successful operational procedures established by the London societies. However, due to a lack of consistent leadership across time, the organization remained stagnant and disorganized until the 1970s (Iacobbo & Iacobbo, 2004). In the 1970s, the organization's name was changed to the North American Vegetarian Society. The society gained momentum because of the Vegan Society's successes after World War II, and after changing its name, began publication of a newspaper focusing on vegetarian issues and events.

The modern vegan movement did not begin until 1944 with the establishment of the Vegan Society, a second organization with the focus of advocating a vegan lifestyle (Stepaniak, 2000). The overall vegetarian movement in the 1970s turned into a political action to stop animal cruelty, and the leaders of the movement appealed to peoples' morals about the cruelty involved in killing animals. During this era of counter-cultural revolution, the birth of the modern American vegan occurred. Vegans seek to "do the least harm and the most good" (Stepaniak, 2000, p.12). There were other groups that advocated for animal rights outside the vegans, but the vegans provided moral leadership. Not all vegetarians were vegans during the 1960s and 1970s, but the vegan political



movement drew more awareness to vegetarianism and veganism and created a sustainable movement advocating multiple initiatives (Stepaniak, 2000, p.15).

All of the available authors writing on the history of vegetarians claimed that this movement was not a fad and has had a long history of celebrated vegetarian advocates (Maurer, 2002; Stephaniak, 2000; & Iacobbo & Iacobbo, 2004). Many of the textbooks and journals on vegetarianism are written by vegetarians for vegetarians. This means that there will be a certain amount of bias towards making the history of vegetarianism look like a progression over time, the publications, especially Stuart (2007), do prove valid points in history linking the different movements. It should be noted, however, that there was no significant coordinated movement until at least the late 19<sup>th</sup> century with the exception of organized religion.

### **To Choose or Not to Choose**

Reasons people choose a vegetarian diet vary greatly. However, many reasons are based on medical and / or personal decisions. Frequently books and articles on vegetarianism or veganism include a section on reasons why people should or would change their diet to eliminate meat products. Typically, these publications discuss health benefits (D'adamo, 1996; Duyff, 2006; Iacobbo & Iacobbo, 2004) or appeal to the reader's moral philosophy on the treatment or slaughter of animals (Hill, 1996; Singer, 1999; Stepaniak, 2000). Another justification to change to a vegetarian diet is the relationship between certain religions and the elimination or restriction of meats either during particular times of the year or always from diets (Dandekar, 1979; Herndon, 1960).

According to Duyff (2006), more people are changing to a vegetarian diet today because of the health benefits of the diet or to counteract an existing medical condition. Duyff stated there is a positive relationship between having a vegetarian diet and increasing general health. In Duyff's study, people who switched to a vegetarian diet were less likely to have "heart disease, high blood pressure, type 2 diabetes, and certain forms of cancer" (p. 504), as well as a lower Body Mass Index (BMI). The BMI is a measure used to calculate if a person is overweight. Duyff emphasized that the switch to a vegetarian diet does not mean that because certain foods are eliminated that one will lose weight or have lower cholesterol. She simply stated individuals need to watch what they eat more than they normally would to make sure a healthy diet is maintained, because vegetarian diets can be just as fattening and unhealthy as non-vegetarian diets.

D'adamo (1996, 1998) placed a very different interpretation on the relationship of a vegetarian diet to the overall quality of personal health. D'adamo's ideas are very progressive for the dietetics field, stating that people with certain blood types should only eat certain foods. On the basis of blood type, he determined that a vegetarian diet was not recommended for all people. D'adamo's extensive research compared how people with different blood types processed food differently. He suggested everyone can be a vegetarian, but persons with certain blood types need to supplement fish or poultry into their diet to help maintain healthy weight and nutrition. The author's research indicated that blood type A was the easiest type to go to an entirely vegetarian diet, because people with blood type A were more likely to have an allergy to meat and less likely to have allergies towards plants and legumes. Also, people with blood type A do have problems digesting meats because they lack a chemical known as Intestinal Alkaline Phosphatase

(IAP). IAP is a chemical found in the digestion tract that breaks down cholesterol. Blood type O has the highest amount of IAP and blood type A has the least amount. Due to this lack of IAP, type A is more susceptible to heart disease and cancer if they have a meat-based diet. His research also showed that having a positive or negative Rh factor (ex. A+ or A-) has little to no affect on the diet of a person. D'adamo's main theme is that a person should eat according to his or her blood type.

Additionally, D'adamo noted that one's "blood type" is actually characterized by a chemical located throughout the entire body. This chemical is mainly concentrated in the digestive tract and not in the red blood cells. The chemical is an antigen and a special type of carbohydrate marker located on the surface membrane of erythrocytes. It is because of these antigens that type A cannot receive a blood transfusion from any other blood type. D'adamo also pointed out that since these antigens are in the digestive system that they can have an effect on the foods that the body will accept or have an allergic reaction. Therefore, certain people should avoid particular foods that can drastically affect the quality of their life.

Another growing population segment is centered on people who switch to a vegetarian diet due to political or ethical reasons. The majority of the political reasons involve reactions to animal cruelty or damage to the environment (Hill, 1996). Another reason people change to a vegetarian or vegan diet is ethical (Singer, 1999; McDonald, 2000; MacNair, 2001). McDonald (2000) empirically examined how people changed to a vegetarian or vegan diet. His research design was as follows.

Purposeful sampling was used, beginning with the June 1996 nationwide March for the Animals in Washington, DC. I employed snowball sampling to further identify vegans from a small core of vegans identified at the March. To increase the probability of interviewing committed vegans, I

interviewed only those who had been vegan for at least one year (Table 1). I used an unstructured interview protocol, with the primary purpose of allowing each participant to share the story of how he or she learned to adopt a vegan lifestyle. Although I asked for clarification or elaboration regarding their learning, most of my contribution to the interviews was to keep the participants from straying away from their stories. (McDonald, 2000, p.4)

McDonald's approach drew from Mezirow's transformation theory (1991) and created a new approach to how people come to question their ethical reasoning for becoming a vegetarian or vegan. Much of learning to become vegan is associated with a process of self-exploration and education. Overall, people who change to a vegetarian diet for political or ethical reasons are more likely to become a vegan (MacNair, 2001).

Some religions place dietary restrictions on their followers (Dandekar, 1979; Herndon, 1960). Devout Hindus and Seventh-Day Adventists adhere to a strict vegetarian diet due to certain religious beliefs. As discussed previously, people who follow the Hindu faith do not engage in any form of violence including the slaughter of animals for food. Seventh-Day Adventists are told to avoid all "unclean" foods, implying a lacto-ovo-diet (including dairy products, eggs and vegetables). Seventh-Day Adventists draw the dogma from Leviticus 11:1-42 that describes in great detail which animals are clean to eat. However, their principle has changed overtime to eliminate all meats from the diet because of the drugs and supplements injected into the animals. Other religions, such as Catholicism, only restrict believers' diet on certain days of the year. Catholics are exhorted not to eat meat on Fridays during the Lenten season or on Ash Wednesday. Thus, religious beliefs are another reason some people adhere to a vegetarian diet or limit their diet during certain periods of the year.

### **Vegetarianism at Colleges and Universities**

There is very little research as to how many vegetarians are studying or working at college and university campuses. The Vegetarian Resource Group (VRG) produces a study every three years to answer roughly how many vegetarians are living inside the United States. In their 2009 study, VRG stated that 3.4 percent of people in the United States were lacto-ovo- or strict vegetarians. If the population is normally distributed, this means that on average at least 3.4 percent of students on campuses are vegetarians. Therefore, if the campus population mirrors the general population, roughly 170 students are vegetarian on a campus of 5,000 students. Several of their other studies illustrated that the majority of vegetarians are college students and people age 55 and older. This observation reinforces the idea that there could be a statistical relationship between the current total population and the campus population. Out of a school of 5,000 or more enrolled students, the number of vegetarian students could exceed 170.

Aramark, a national college contracted food service company, distributed a press release in 2005, stating that in their study, out of 100,000 college and university students, 24 percent of students stated that having strict vegetarian meals on their campus was important to them. This press release is important because it points the reader to infer that strict and lacto- ovo-vegetarians are not the only students eating vegetarian meals.

Lastly, Pickarski (2006) wrote an article in the Vegetarian Resource Group Journal regarding how students should approach accomplishing a menu change in on-campus food service. They must first understand how professional kitchens operate when processing special food requests. The difference is that when dealing with a professional kitchen, the main goal is to satisfy a large quantity of people while trying to maintain a healthy balanced diet. Therefore, students must understand that changing to a full

vegetarian menu is not possible and should not be even considered. Realistically, students must prove to the food service directors that there is a significant percent of students that would eat vegetarian meal offerings.

Self-operated food services can change a few items on the menu to suit the needs of students easier than contracted food services. Pickarski (2006) demonstrated that contracted companies such as Aramark, Bon Appetit, Compass, or Sodexo have a corporate structure and that they are already providing vegetarian options to other schools. The problem arises because contracted schools have food providers that may or may not have vegetarian items available under the contract. Overall, institutional self-operated food services are typically not as concerned with profit margins. If it costs more to make a vegetarian meal than the average meal, the food service director would be more likely to support the change. At the self-operated schools, students must look at what is already being provided and suggest basic changes to make the menu more vegetarian or strict vegetarian. Typically, this can be done by simply eliminating a few choice items that do not change the meals much. Pickarski stated that changing the food service options on campus can be a long process, but the end result is better and normally healthier for the student body.

## **CHAPTER III**

### **Methodology**

The present work is a descriptive study of food service options for vegetarians in medium to large colleges and universities in the State of Illinois. The purpose of the study was to conduct a cross-sectional study of the institutional food service options for vegetarian students attending various Illinois institutions of higher education. Variables of interest are the number of students enrolled at the institution, number of food service operations, availability and frequency of vegetarian entrées, type of food service (self-operated, contracted, or both), and who specifically was the commercial vendor for the food service operation.

For the purposes of the present study, the total number of full-time on-campus students enrolled at eligible institutions was stipulated to be at 5,000 or more. An institution with at least 5,000 students is likely to house a large food service operation, and an enrollment of 5,000 or more students has the statistical likelihood to include at least 200 vegetarians within the student body, given the U.S. population base rate and normal distribution similar to the national estimate of vegetarians in the general population (VRG, 2009). This study also included only four-year institutions that had on-campus housing, with one exception explained below. Two-year colleges and community colleges were eliminated from the study, because most two-year colleges and community colleges do not house students on-campus and/or require them to purchase on-campus meal plans. The number of food service operations on a campus was defined as the number of available dining facilities from which a student can choose menu options on a typical weekday.

The availability and frequency of vegetarian meal options were measured as the number of vegetarian entrées or “make your own meals” that can be vegetarian that are available on an average week at the institution. The number of vegetarian entrées includes all items that can be prepared without any meat from any animals.

Vegetarian meals in this study were defined as meals that did not include any animal meat or meat products but did include cheese and milk products. This diet is normally referred to as a lacto-ovo-vegetarian. Lacto-ovo-vegetarians comprise the highest percentage of vegetarians (Aramark, 2005). Full vegetarian meals will be defined as a meal that does not include anything from an animal including cheese and milk. Typically, this is known as a vegan diet. However, since the purpose of this study is on food options, not ethical or moral decisions, the term vegan will not be used.

Types of food service are divided into three categories: self-operated, contracted, and a combination of both self-operated and contracted. Self-operated food services are dining facilities that are supplied by a vendor, but food service employees are employed by the institution. Contracted food services (ex. Sodexo<sup>®</sup>, Marriott<sup>®</sup>, Chartwell<sup>®</sup>, etc.) are vendors outside the university that are contracted to provide food services for the university. These external companies hire their own employees and have agreements with the suppliers. The contract stipulates specific foods and the quantity to be provided. These contracts, especially at larger schools, can be in the millions of dollars for one contact year. There are some universities that choose to adopt a system that combines both self-operated and contracted food services. These universities hire a certain percentage out to a contracted company and the other portion is self-operated.



There are many different food service vendors that supply the different schools. These vendors will make agreements or contracts with schools or contract companies to provide the certain foods that are shipped to the schools at a particular price per item. Some examples of these companies are McCain Foods USA, Sysco<sup>®</sup>, or United States FoodService.

Due to the amount of schools in this study that adopt the semester system for academic classes, the academic school year was defined as the time between August through May when classes are normally in session. Based on current data from the Illinois Board of Higher Education, there are 24 institutions of higher education that enroll at least 5,000 full-time students (Illinois Board of High Education, 2010). From this list of colleges and universities, quantitative and qualitative data were collected on basic information about the institution and the food service. Data collection protocol was as follows.

1. A list was created by the Principal Investigator (PI) of Illinois colleges and universities that enrolled at least 5,000 students in the 2008-2009 academic year. Enrollment figures were tallied according to the Illinois Board of Higher Education web site (<http://www.ibhe.state.il.us/>). All institutions are categorized by the Basic Carnegie Classifications found in Appendix A.
2. Jody Horn, PhD, RD, LDN, EIU's Food Service Dietitian, sent an email to the directors of peer food services for the 24 schools informing them of the study and credibility of the PI to encourage maximum participation in data collection activities. This email was sent in late February 2010.

3. The PI called each of the colleges or universities in March 2010 and asked several different questions regarding the survey. Questions were divided into quantitative and qualitative open-ended sections. All phone interviews were conducted using questions as found in Appendix B
4. Data obtained were analyzed by categorizing and cross-referencing the information from each school into a narrative description.

## **CHAPTER IV**

### **Findings**

Below are descriptive data collected from food service interview participants at the colleges and universities surveyed. A small portion of the data displayed below was gathered from the Illinois Board of Higher Education and the National Association of College and University Food Services websites. All interview data were collected via phone interviews with each food service director and other associated officials at the eight schools responding to the PI's request for participation. Descriptive findings by institution are divided into two parts. The initial section begins with a short institutional profile including the Carnegie Classification (Carnegie Foundation, n.d.) followed by a detailed outline of each school's food service options. For a full listing of Carnegie Classifications, please see Appendix 2.

#### **School Interview Profiles**

The primary investigator contacted 18 total schools that fit the profile determined by the methodology. From these 18 schools, eight schools (44.4 percent) responded to the request for participation in this research. The eight institutions are described in alphabetical order.

#### **Bradley University**

Bradley University is a private not-for-profit Master's/L institution located in Peoria, Illinois. The university's enrollment for the 2009 fiscal year was 5,873 students. Of those almost 5,900 students roughly 1,500-2,000 students lived on-campus. The average room and board rate at Bradley University was \$7,350 per year. Bradley

University's room and board rate was one of the lowest among the institutions in this study.

Bradley University's food service, on the surface, would appear to be a self-operated college food service; however, their food service is unique in their food offerings and services that they provide to their students, faculty, and staff. All food service on Bradley University's campus is operated by a contracted company called Compass Group<sup>®</sup>, the Americas (<http://www.cgnad.com/default.asp?action=article&ID=6>). Compass Group<sup>®</sup> has been in operation on Bradley's campus for nearly forty-six years. Since this contracted food service has been a part of Bradley for such a long period of time, it has integrated itself not as a contracted company operating on the campus, but as another student service department on the campus.

Compass Group<sup>®</sup> operates many different on-site food service locations. On-campus options are Williams Hall Dining, Geisert Hall Dining, Center Court at Williams Hall, Café Bradley at the Student Center, Student Center Dining, Outtakes at the Student Center, Jerry's Juice Bar, Lydia's Lounge, The Stack, The Faculty Dining Center, and the Wellness Center. In addition to food service sites on Bradley's campus, the Compass Group<sup>®</sup> is responsible for stocking all 168 on-campus vending machines. Williams and Geisert Dining Halls are the typical all-you-can-eat college dining hall. Center Court at Williams Halls is a food court where students, faculty or staff can purchase ala cart pizza, items from the grill, salads, sandwiches, or snacks. In addition to the food served at the Center Court, a convenience store provides students with the basic necessities. Café Bradley at the Student Center is a café that serves Freshens smoothies, Starbucks coffee,

Mill Street sandwiches, and other food items such as chicken tenders or a sunset grilled chicken salad. Outtakes at the Student Center is a convenience store that has many different items including healthy snacks or cough drops. Jerry's Juice Bar is a café styled juice bar that features several different juiced drinks as well as sandwiches, smoothies, and protein bars. Lydia's Lounge is a food service dedicated to the founder of Bradley University, Lydia Moss, and serves student food during the late weekend hours when normal food services are closed. The Stack is a café located in the Cullom-Davis Library and is open the same hours that the library is open. Bradley also features a faculty dining center specifically for faculty and their guests. Lastly, the Wellness Center is a very unique concept to a college campus, because it is a multipurpose center that has a goal to help students maintain a well-rounded, healthy life. The Wellness Center is a place on-campus where students can eat if they are looking for a healthier meal. This includes where a student could find most products that are dietary specific such as gluten free or vegetarian or vegan diets. Overall, Bradley University has many different food options available to its students.

Bradley was one of two schools included in this study recognized as a vegetarian friendly school by PETA2, the college version of People for the Ethical Treatment of Animals. The Bradley Compass Group<sup>®</sup> food service was awarded honorable mention in the 2009 Most Vegetarian-Friendly Colleges in the United States (Peta2, 2009, ¶ 19). Bradley barely missed being in the top-ten vegetarian-friendly colleges in the United States.

Further west, Bradley University emerged as one of the most surprising newcomers to this year's list. A medium-sized private college in Peoria, Illinois, the school boasts "Big Ten" flavor and vegan options that give schools on both coasts a run for their money. Some of the dozens of

remarkable meatless choices are vegetarian meatball sandwiches, grilled soy cheese, vegetarian Jamaican stew, and vegetarian Italian sausages (Peta2, 2009, ¶ 19).

While the Peta2 recognition was an honor, the food service director said he simply listened to the students and provided what they wanted. Food service attention to student needs included vegetarian students and any other student with special dietary needs.

Compass Group<sup>®</sup> at Bradley ensures that all students are fed well and are healthy. First, when any student has any type of special dietary need, the student can meet with any food service staff, typically with the food service director, to determine the best solution for the student. During new student orientation, students have an opportunity to inform orientation staff members if they have any kind of dietary restriction. Then the student and their parent, if they would like, can meet with the director to discuss the student's dietary needs and how the food service could help that student feel at home while they are studying at Bradley University. In one particular instance, a student wanted a specific product that was unique to their dietary need. The product could not be purchased through Compass Groups'<sup>®</sup> normal vendors, so the food service director purchased the item directly from the supplier to ensure that the student got the food they requested. This was just one example of how the Compass Group<sup>®</sup> food service at Bradley University puts the student's needs first.

Compass Group<sup>®</sup> ensures that their food is student friendly through staff training. All food service staff members go through yearly training to ensure that all food service workers know how to reduce and / or eliminate almost all cross-contamination between food dishes. Staff members are trained to use a different pan to cook a vegetarian or dietary specific meal than for regular meals. Preparing meals may take more time, but

staff members want to assure students that food for special dietary needs has not been cross-contaminated.

Student involvement is one of the major reasons for changes in the Bradley food service. Both the Student Senate and the Association of Residence Halls (ARH) have Food Committee Chairs. These food committee chairs have the important job of conveying student opinions directly to the food service director in regularly scheduled meetings. Holding regular meetings with these student leaders is very important, because students are more likely to approach another student rather than a staff member if they would like something changed in the food service.

Compass Group<sup>®</sup> takes the opinions of students, faculty, and staff very seriously. One of the ways that the food service takes student opinions seriously is by holding an annual food show. During the food show, forty vendors come to Bradley's campus and give samples to students, faculty, and staff that attend the event. Food service staff hand out evaluation forms to rate the various food vendors' samples. Using these evaluation results, the food service director determines what kinds of foods to provide and also what vendor to purchase the food.

Evaluations of the campus food service are conducted in several ways. Comment cards are the most prevalent way for students, faculty and staff to voice their opinions. The cards are available in each of the food services. Also, students are encouraged to take a brief online satisfaction survey (<http://go.compass-usa.com/bradleyuniversity/feedback/FeedbackForm.asp>) on the food service website. Both the comment cards and the online comments and feedback are similar. The evaluation forms ask for name, phone number, email, permission to contact the respondent, which food service was used, and the

respondent's comments about the food. The person filling out the card can give as much or as little information they would like about themselves, because the food service is mainly concerned about the food comment so the issue can be addressed. However, when students leave contact information, a follow-up email or phone call with that student is typically made.

Overall, Bradley University's food service has a great atmosphere for all students that want to get a good meal. The staff is very open to suggestion and change which is very good for students with dietary needs. One of the most important ideals that the food service at Bradley University displayed was the level of suiting student needs.

### **Eastern Illinois University**

Eastern Illinois University was founded in 1895 as a teacher training school in Charleston, Illinois. Eastern Illinois University is a public Master's/L institution that produces bachelors' and masters' students in 78 different subjects. The university enrolled 12,040 students in the 2009 fiscal year. Of these 12,040 students, roughly 4,000 students lived in on-campus housing. All students living in campus housing have a meal plan. The dining service on campus is completely self-operated and is managed in the housing and dining department on campus.

Eastern Illinois University's housing and dining services have several unique traits that make the institution stand out. The first unique trait of the housing and dining is that the university has an entire section dedicated to fraternity and sorority housing. There is a section dedicated to historically white fraternities and sororities and a section for historically black fraternities and sororities as well. Another unique attribute of Eastern



Illinois' housing and dining is that there is a dining hall attached to eight out of the ten residence halls.

There are several different locations that students, faculty, or staff can eat on-campus. There are four all-you-can-eat dining centers, two a la-carte dining centers, two "convenience centers", and a coffee shop. The residence hall dining facilities include Taylor Hall, Thomas Hall, Carman Hall, and Stevenson Tower Dining. Each dining hall has a particular theme as to what is served daily. A few examples of these "themes" are that Taylor Hall exclusively serves different Tyson Chicken entrées each day as part of a concept called Sunset Strip; Carman Hall serves different varieties of Mexican food everyday and has a made-to-order Asian buffet; Stevenson Tower Dining hall has two separate sides to the dining facility with two separate dining themes (Tower East and Tower West). Tower West dining service offers an all-you-can-eat "brunch" that serves made-to-order Belgian waffles and omelets. Tower East serves sub sandwiches with a la-carte sides such as salad, chips, pasta salads, fruit, yogurt, and many other options. The other ala-carte dining center is the Martin Luther King Junior University Union Food Court (MLK, Jr., Union). This food court features Subway, Chick-fil-a, Panther Grille, Greek Odyssey, Charleston Market, and Connie's Pizza. There are two Marketplace Convenience Centers that provide students with snacks, ready-to-eat food items, and basic necessities such as milk, cereal, and bread. Lastly, the campus has their own coffee shop called Java Beanery and Bakery in the MLK, Jr., Union that serves Seattle's Best<sup>®</sup> coffee and pastries.

The director of University Dining Services is a registered dietician who oversees all purchasing and production of food on the campus. This oversight includes the

campus-run catering service, Panther Catering, in the MLK, Jr., Union. The responsibilities of the director also include evaluating the quality and nutrition of the food that is being served. Additionally, the director personally helps any student with (a) food allergy(ies) or preference(s) to find appropriate food that suits the student's dietary needs.

For vegetarian students, several suitable food options are available and are provided daily. The majority of the vegetarian options available are derived from make-your-own meal stations across the campus. An example of these make-your-own meal stations is the build-your-own omelet station at Tower East Dining. At this station, students fill a cup with what they would like in their omelet such as a variety of vegetables, cheeses, and meats. The student gives their selections to the food service worker who cooks the student's omelet to order. Another example is the Jump Asian Cuisine located in the Carman Dining Hall. At this station, students choose from a variety of noodles, vegetables, meats and sauces that they would like to be stir-fried together by a food service staff member. These two examples illustrate the many different options that are offered across the campus to vegetarian students.

Currently, any student attending Eastern Illinois University with a food allergy or any food preference is referred directly to the director / dietitian. The director / dietitian will walk the student through the daily menus to see what menu choices would be best for the student. In the past, if a student requested a particular food, the dietitian has been more than willing to purchase that item for the student. Typically, when students have a particular request or a special diet, students are limited to which dining hall they can eat because the specialty meal is prepared for them at only one food service location.

Student opinions are important at Eastern Illinois University. Housing and dining

staff are constantly striving to better serve the student. As a result, there are many different ways for students to give their opinions about the food and service that is provided to them. One of the easiest and most visible ways for students to leave feedback is on the feedback cards located near the entrance of every food service on-campus. Another way students can submit their opinions and suggestions is in the annual housing survey that is produced by the Housing and Dining Department. There are many other sources of input that Housing and Dining uses. Secret shoppers (students hired by Housing and Dining Services specifically to assess food service offerings) are used to get student opinions on food and service quality, cleanliness of facilities and the variety of food options available. Dining with the food service director is another way the Housing Department gets feedback from students. Many different ways for students to voice their opinions are used so that food service personnel can implement more of the student's dietary needs into the housing and dining options.

Overall, Eastern Illinois University has a great food service that is dedicated to serving student needs. Relatively few vegetarian students have approached the food service staff about wanting to change the menu. Since there are a number of make-your-own-meal stations across campus, the director suggested that many vegetarian students may have solved their own dietary needs at these stations. Students can choose exactly what is going into the food they eat, so it is up to the student what they put into their food. These make-your-own meal stations may be the best options for vegetarian students as long as the food service personnel are trained on how to reduce and eliminate cross-contamination between different foods.

### **Governors State University**

Located 30 miles south of Chicago, Illinois, Governors State University is a public Master's/L institution located in College Park, Illinois. The university was founded in 1969 to depart from conventional university ideas and concepts, and teaches only junior, senior, and graduate students, enrolling 5,636 students in fiscal year 2009. Governors State University is an entirely commuter campus with no on-campus living option. Without on-campus housing, the university does not require anyone to purchase any food or meal plan, so the food must be high quality and at an affordable price for the 300 people who typically hold a meal plan. Thus, everyone that purchases meal plans are faculty, staff or students who actually want to eat the food that is prepared at the institution.

The Director of Food Services at Governors State University described their contracted food service operation provided by Food Services, Inc. (<http://www.fsifoodservices.com/>) as very unique since there is no on-campus housing, but food service is provided in a residential-style all-you-can-eat setting. Even though the dining hall is only open for lunch and dinner, a variety of options are available for students, faculty and staff to choose from for entrées, sides and soups. During every meal there are two entrée choices. One is a vegetarian dish and the other is a non-vegetarian dish. Additionally, the dining hall features several side dishes that are vegetarian each day.

A listing of all menu provisions can be found on the campus website ([http://www.govst.edu/auxil/t\\_auxil.aspx?id=2156](http://www.govst.edu/auxil/t_auxil.aspx?id=2156)). Several dietary distinctions are clearly marked on the daily menu. The separations are: V for a vegetarian meal, O for an

organic meal, VG for a vegan meal, and items listed in red are healthy choice items. If a student were a vegetarian or vegan on the Governors State campus, the university's website makes it very clear what a vegetarian or vegan student could eat in the dining service.

At Governors State University, the vendor, Food Services, Inc., provides several standardized food items on a daily basis. The food service provides two soups every day and typically one of these soups is vegetarian. Main entrées are typically classified as "Comfort Classics," and include such items such as honey glazed ham, buttered noodles, tater tot casserole or tofu tacos. Additionally, the food service serves daily a pizza, a calzone and a deli sandwich. The GSU Grill is an additional service area adjacent to the main dining room. This grill provides hamburgers, turkey burgers, garden burgers and rotating specials such as patty melts or Philly-cheese steak sandwiches. For a small food service, Food Services, Inc., provides Governors State University customers with a lot of variety in food choices.

The food service operation is also very unique because of the relatively few number of meals served per day; this directly affects their food production. Food Services, Inc. produces around 500-600 meals per day, so the food service production is small in comparison to other colleges and universities of similar size to Governors State University. However, having a smaller food service has added benefits. The largest benefit is every meal is prepared by two chefs. Additionally, any changes or supplements to the menu do not take long to implement. Since adding new items does not take much effort, adding more variety to their vegetarian options or adding newer entrées to the menu is comparatively simpler.

Food Service, Inc. takes a unique approach to ascertaining students' opinions about the food that the food service serves. The food service director self-promotes on the Governors State closed television network, in the school newspaper, on posters throughout the campus and several other different ways. These promotions let students know what is on the menu and ways to voice their opinion about the food. Also, the dining hall has comment cards placed throughout the facility to ensure that students, faculty and staff that use the campus food service can voice their opinion.

The students' opinions are reflected in the development of a healthy satisfying menu by the food service director. Student opinions are valued, because the menu includes typical "comfort foods" as well as vegetarian and vegan options for those students that have restricted diets. The reasons why Food Service, Inc. provides half of all meals being vegetarian or vegan is due to student and faculty opinion. Food Service, Inc. at Governors State University uses their unique situation to ensure that their students can enjoy their dining experience.

### **Illinois Institute of Technology**

The Illinois Institute of Technology was created in 1940 from a merger between the Amour Institute and Lewis Institute. The Illinois Institute of Technology is a private not-for-profit RU/H institute located in several different locations around and in Chicago. During the 2009 fiscal year, the Illinois Institute of Technology enrolled 7,707 students and roughly 1,200 students lived on-campus. Out of these students about 1,000 of them were on a meal plan through the institute. The average room and board rate for the Institute of Technology was \$9,704 per year.

Between two separate properties, the Illinois Institute of Technology self-operates six food services. All of the food services on these properties are operated by the university's self-operated food service except for one dining hall that is operated by Sodexo, Inc. The food services that are on-campus include the Commons Cafeteria, the Uncommon Corner, the Bog at IIT, the Center Court Café, Global Grounds Café, Pritzker Club, and Einstein Brothers Bagels. The Commons Cafeteria, operated by Sodexo<sup>®</sup>, is an all-you-can-eat dining center that is listed as one of the fifteen best college places to eat (Illinois Institute of Technology, 2010). The Uncommon Corner is a convenience store that provides students, faculty and staff with healthy choices for snacks that are natural, organic or gluten-free. The Bog at IIT is a pub located on-campus that features full lunch and dinner menus as well as providing students with a place to get drinks or play billiards or darts. The Center Court Café is a food service that provides mainly soups, sandwiches and shakes at a very reasonable price. Global Grounds Café is where students, faculty and staff can get a number of different coffees and NRgize<sup>®</sup> smoothies. Open only for lunch, the Pritzker Club features a fresh, seasonal menu of soups, lunch entrées, and desserts. The last food service on-campus is Einstein Bros. Bagels. This bagel and coffee café serves only Einstein Bros. bagels and a variety of coffee drinks. These are all of the different food services that compose the Illinois Institute of Technology's dining service.

One of the best ways that the Illinois Institute of Technology helps their vegetarian and vegan students in distinguishing what meals are safe to eat is their menu (<http://www.iit.edu/~sodexo/menus.html>). There are several selections for the menu, and the main options are for students to select the type of meal (breakfast, lunch or dinner). The menu describes what is being served and what station is serving that particular food.

Thus, the student should be able to navigate where to locate the food they want.

On this interactive menu, the first thing that users notice is that there are four different icons next to the food items. The icons represent if the meal is vegetarian, vegan, carbohydrate friendly or part of a “well-balanced” meal. This helps vegetarians and vegans to find appropriate choices for what they can eat, depending on their dietary preferences. Also, when the user selects any of the food choices with a click of the mouse, a screen appears with the dietary and nutritional facts of a particular meal. The online menu is beneficial for all students to determine what foods to eat in order to maintain a healthy balanced diet. Also, students with a particular food allergy or that are avoiding a particular ingredient in foods can see what entrées they need to circumvent.

Overall, the Illinois Institute of Technology in Chicago is actively seeking to ensure that all students’ food needs are met. This is highly evident in their Students Speak satisfaction survey as reflected in the student quotation below.

For the price, I think the food is extremely high quality. Also, I really can't express my gratitude for having these places, which are good, on-campus. I started my graduate program in 2002, before the new campus center and before IIT had things like food and coffee on campus. I worked fulltime and took classes at night. A cup of coffee and a sandwich make ALL the difference in how much attention you pay to a lecture from 6-9:30 PM, and your overall mood and participation. So grateful for all of these places! –Anonymous Student at the Illinois Institute of Technology

This is an example of many of the student comments about the IIT food service.

Obviously not every student can be pleased, but the food service staff at the Illinois Institute of Technology in Chicago, Illinois work to ensure that their students are well fed.



### **Illinois State University**

Illinois State University is a state assisted DRU institution located in Normal, Illinois. During the 2009 fiscal year, Illinois State University enrolled 20,800 students and around 6,000 students lived on-campus. Additionally, there were 6,400 students on a meal plan. All students are required to live on-campus for at least two years. Due to the two year requirement, there are many students requiring on-campus housing and there are 11 different residence halls and several other places for students to live on-campus. Illinois State University features a self-operated food service.

There are three main dining centers for students to eat: Watterson Commons, Marketplace at Linkins Center, and Southside in Feeney. Watterson Commons features hamburgers, pizza, Asian dishes, and a variety of vegetarian options. The food options produced at the Watterson Commons are produced with the concept of providing students with “comfort” foods they would normally eat at their parents’ house. The Marketplace at Linkins features a number of deli sandwiches, a full salad bar, pastas, pizza, and a Mongolian grill. Southside in Feeney features meals similar to rotisserie chicken, pizza or other “home-styled” entrées. As a unique feature, Southside operates a bakery that produces cookies, muffins and much more. There are many other places to eat on-campus such as the Airport Lounge, Burger King, Business Bistro, Einstein Bros. Bagels, Freshens, McAlister’s Deli, Pizza Hut Express, and Subway.

At Illinois State University, the food service produces around 10,000 meals each day in the three main dining centers (Watterson Commons, Marketplace at Linkins Center and Southside in Feeney). Thus, this institution produces a great quantity of meals for the students each day. When an institution produces this many meals it can be easy to have a

lack of variety of food in a particular dining hall. The food service director stated that their food service provides a variety of rotating food options at each of the three dining centers, so a student can eat at the same dining center several days in a row and never have a problem finding different items to eat. This is also true for vegetarian and vegan students that arrive on their campus. At each of the dining centers, there is at least one item that is vegetarian and one food item that is vegan; however, there can be up to four vegetarian options in a given dining center. The food service director actively tries to give a greater variety for vegetarian and vegan students, more than a veggie burger or tofu dog. This is highly evident if one views their menu displayed on-line (<http://www.dining.ilstu.edu/menus/>). There are many different vegetarian and vegan items that are listed on the institution's online menu.

Illinois State University values their students' food greatly. One of the ways that the institution displays this is by having at least two full-time chefs at each of the dining centers. Employing chefs to prepare the food is a unique trait about this institution's food service, because other institutions may have one chef that is over the food production for the university but not as many as Illinois State University's food service.

Staff training is another way that the institution shows that it cares about students' food. The largest concern of vegetarian and vegan students is the cross-contamination of dishes. The food service director stated that it is necessary to constantly train the staff about this subject, because in college food services, there are many new students and staff members every semester that work to prepare food for the students. Thus, if the staff is trained correctly, the risk of cross-contamination is drastically reduced or eliminated.

Due to the large student enrollment at Illinois State University, students can feel

like a number in a crowd and not voice their opinion about their food. There are many different ways that students can voice their opinion about the food and get information about what food is being provided. One of the easiest ways for a student to find information is to go to the Illinois State University Dining Services website (<http://www.dining.ilstu.edu/>) and click the link to “Ask the Dietician”. This will send an email directly to the registered dietician who will send a response email back to the student regarding the question. Emailing the food service dietician is an easy way to make students more comfortable about asking questions to the dining staff. If the student feels like talking directly with a dietician, they can schedule an appointment to talk with a dietician to review the variety of options that the student can choose from to eat.

Another way students can voice their opinion about the food is the comment cards. Comment cards are a simple way for students to give their opinions about the food and it is up to the student if they would like to leave their contact information. The food service likes it better when students leave their name and contact information, because they can follow-up with that student to ensure that they are satisfied. An additional way for the institution to gather information about the students’ satisfaction about the food service is the satisfaction survey that the food service conducts every other year. This survey collects information in a variety of ways including students’ satisfaction of the meal provisions.

Students at the Illinois State University should have no problems finding food that they would like to eat. This institution features a wide variety of choices for their food. At a quick glance of the institution’s weekly menu, there are various items for vegetarian and vegan students such as honey walnut pilaf, eggplant parmesan, or stir-fried tortellini.

On the menu, vegetarian and vegan dishes are easily distinguished by a “V” for a vegetarian dish or “VN” for a vegan dish.

If any student has a problem finding food that they can eat with their diet, they would first contact a dietician to see if there are current provisions for the student’s food preference. If the dietician cannot help the student because of having a very complex food need, that student can apply for an exemption. An exemption may be granted to allow that student to live off-campus. This is not advertised to students because the institution believes that living in the university housing is a part of the holistic student developmental experience. Nevertheless, if a student’s needs cannot be met, the student’s exemption is reviewed by a committee of various people around the campus. The food service director stated that most of the student exemption cases involved severe food allergies, but sometimes the committee will meet and decide that the student’s needs can be met with the current provisions provided by the university.

Illinois State University attempted to provide students with a complete vegetarian food station that only provided vegetarian and vegan meals. This is one of the most unique parts about their dining service. The food service director stated installing a vegetarian and vegan meal station was a great idea. However, after the creation of a vegetarian station, not many students ate from the station. Since the vegetarian food station was more expensive to run and the students did not express an interest, the university removed this station.

Overall, Illinois State University, under the direction of the food service director, is a place where students can not only find a meal to eat but a place that has a variety of foods. It is obvious between the training sessions on cross-contamination and many other

reasons that this food service is dedicated to serving their students' dietary needs. Illinois State University successfully accomplishes the monumental task of producing numerous meals for all of their students, including vegetarian and vegan students.

### **Roosevelt University – Schaumburg Campus**

Roosevelt University is a non-religious affiliated private-not-for-profit Master's/L institution. The campus is divided between two separate campuses in downtown Chicago, Illinois and Schaumburg, Illinois. The school typically enrolls 7,700 students each semester. Only the food service director of the Schaumburg campus responded to the request for participation; thus, this section will primarily focus on the Schaumburg Campus' food service.

Roosevelt University's situation is very similar to a few universities because the institution contracts two separate food service providers for each of their campuses. The downtown campus holds a contract with Aramark and the Schaumburg campus holds a contract with Food2You Catering. The primary investigator spoke with the food service director, who is the President and Catering Director of Food2You Catering. The food service director's responsibilities are to co-manage Food2You Catering, operate the food service at the Schaumburg campus, and cater part-time at the downtown Chicago campus for various events. It is important to note that Food2You Catering was formed to bring gourmet hotel catering out to the public, catering a number of different events.

For the food service director, the Schaumburg campus of Roosevelt University is unique because it does not have the "captive audience" that most universities do with an on-campus living experience. Since there is no on-campus living, there is no meal plan

required for students. Thus, Food2You Catering has a challenge of providing high-quality foods at economically competitive prices.

Food2You catering converted the kitchen at the Schaumburg campus into a place where students can eat gourmet meals. With the exception of breads and rolls, all food produced by Food2You catering is made from scratch from fresh meats and produce. Food2You purchases all of their bread from a local bakery. The food service director stated that all meats are purchased locally and are all halal beef and chicken. Additionally, the food service director selects a variety of vegetarian meals that are much more than just a salad. The menu is comprised of a number of hearty vegetarian meals such as vegetarian lasagna. Since this particular food service only serves around 400 meals per day, it is easy for Food2You catering to rotate different items into the menu and provide a great variety of foods to choose.

Food2You catering takes the opinions of their students' seriously and they want to know what students want to eat. The best way to contact the food service is the comment cards in the dining facility. Students, faculty or staff can leave comments they may have about the food. Food2You catering actively pursues ways to better serve their customers, the students. As this food service is fairly small, customer service is critical to maintaining a successful business.

Food2You catering provides an exemplary service to their students. The food service director and the rest of the food service workers at Food2You catering have developed a food service that gets students interested in "real" (food that was not processed in any way) but prepared from raw ingredients. Their food service may not be very large but the concept behind the food is revolutionary. Ultimately, the food service

director challenges other food services that operate on college campuses to produce food that is not processed or prepared from a can.

### **Southern Illinois University – Carbondale**

Southern Illinois University is a public RH/U institution. This school has two campuses that operate separately from each other: Carbondale and Edwardsville. This section is dedicated to the Carbondale campus, which is the main campus. The Carbondale campus is located in Carbondale, Illinois, and during the 2009 fiscal year, the university enrolled 20,500 students. Of the 20,500 students enrolled, roughly 4,200 live on campus with a meal plan. In the 2009 fiscal year, it cost students at least \$7,137 per year to live in the housing at Southern Illinois University at Carbondale.

This institution is similar Roosevelt University, because this campus' food service is divided between two food services: self-operated food service and Chartwells<sup>®</sup>. The division between the self-operated dining and contracted dining on Southern Illinois University at Carbondale's campus is very visible. The Student Center is solely operated by Chartwells<sup>®</sup> and the rest of the campus food services on campus are operated by the university's self-operated food service. This works very well for the institution, because there is a distinct difference between what is provided by the contracted food service and the self-operated food services.

The Student Center dining is a contracted service that is provided by Chartwells Dining<sup>®</sup> with a subcontract for McDonalds<sup>®</sup>. All food at the Student Center is a la-carte, and there is a great variety of places for students to eat. The different places students choose to eat include Blimpie<sup>®</sup>, Chef Yan Can Cook, Chick-fil-a<sup>®</sup>, McDonald's<sup>®</sup>, Maroon

Spoon, Old Main, Student Center Catering, Rio Frontera, Saluki Oasis, Starbucks<sup>®</sup>, Tomato Head Red, and Wild Greens. All of these stations are operated by Chartwells Dining<sup>®</sup> with the exception of McDonalds<sup>®</sup> that operates under a separate contract. Students can pick and choose what they can eat based on their dietary restrictions. Not all dishes are labeled as vegetarian, vegan, or non-vegetarian, but students can ask the food service employees which foods are and are not vegetarian.

At Southern Illinois University at Carbondale, the rest of the campus food service consists of residence hall dining, small grocery stores, and cafés. Students, faculty, and staff have the following dining options: Trueblood Hall, Lentz Hall, University Hall, and Grinnell Hall. These halls are all-you-can-eat dining facilities that feature cook-to-order meals in most. There are two express dining centers; Lakeside and Eastside Express. The express dining centers are open for lunch and dinner and offer ready-to-eat and microwave meals. Occasionally, the Eastside Express will offer hot food items. The other food services on-campus that are not included in the meal plan are Grinnelli's Restaurant, Lakeside Latte, the University Hall Snack Shop, and the Essentials. Grinnelli's Restaurant is operated much like a typical restaurant that serves a variety of pizzas, pastas, and baked goods. The Lakeside Latte is a coffee shop that serves various coffee beverages, sandwiches, and desserts. The University Hall Snack Shop and the Essentials are both convenience stores located on-campus that provide snacks and other necessary items for the college experience like laundry detergent or frozen foods.

The food service director is the registered dietician for the university and oversees all food production in the residence halls, the express food stations, Grinnelli's Restaurant and the convenience stores. In the residence halls using the "swipe" system, the actual



number of meals provided is hard to determine. However there are roughly 5,000 card swipes each day for the self-operated dining facilities.

Since there is such a wide variety and quantity of foods that are offered at the university, students might be overwhelmed with the different choices that are available. If vegetarian students at this campus ever have a problem finding food at any of the dining locations on-campus, they can talk to the food service director about the provisions at any of the dining facilities. The food service director will sit down with the student and show them which items they can eat in order to maintain a balanced diet and eat according to their preference or requirement. This service is available to all students who have any type of food preference. If the student has any specialty food requests, such as a particular entrée, the food service director will sit down with the student and the chef to see if it is possible to prepare a particular dish. Normally, most requests are granted, but sometimes, due to the cost of the item or the availability of the item, it is difficult to provide an entrée. Any problems or requests are handled on a person-by-person basis due to the lack of interest in changing the current menu.

In a particular situation, two students were actively involved in changing the food options on this campus. The students classified themselves as vegans, filled out comment cards stating that they were unhappy with the selections. These two students provided their contact information for the food service to contact them. With the students' contact information, the food service was better able to meet their specific dietary desires. In this particular situation, the students were more than happy to sit down with the food service director and develop a plan to implement more vegan dishes that would suit the students and the food service professionals. Most of the changes made were minor changes to

dishes that are currently being provided. In the up-coming fall 2010 semester, a full list of vegan dishes were provided.

While meeting with these two students, the food service director received an excellent suggestion from them. Their suggestion was to set up a booth at the entrance to each of the dining centers to provide information about the food that is provided and information on resources that are available to students that have special dietary needs. The food service director took this request and turned it into a reality. For the fall 2010 semester, a booth was set up at the entrance of each of dining halls for the first week of classes that provided a service that the two students requested.

Outside of these two students expressing their opinions, most students' opinions that were expressed mainly were based on the hours of operation. Currently, this is a concern of many students because most of the dining facilities close at seven p.m. Since students have voiced their concern about this issue, it is currently being taken into consideration; however, there is no current plan to change the hours that the dining facilities are open.

The food service director stated that most students that have special food needs are proactive in finding foods that suit their specific needs. Thus, if the students have a specialty food that they require that is not being provided, they will let the food service know. The majority of the students that contact the food service are students with a food allergy, but there are a select few that voice their opinion about needing different options provided on the menu.

Students can view the menu online for each dining hall. The food service director is currently working on the menu to list which items are vegetarian, vegan, or health

choice meals. Updating the menu is a work-in-progress, due to the vast number of items that are provided. Additionally, a rotating menu is very difficult to maintain since new or different items are added to the menu constantly. On Southern Illinois University's Food Service website, most of the items are labeled. The website displays a disclaimer that not all vegetarian, vegan or healthy choice entrées are listed.

Southern Illinois University at Carbondale is slowly trying to show students that they are a vegetarian and vegan friendly campus. The institution currently provides options for students, but sometimes students are scared or misinformed about how to address the issue of changing the food service. Therefore, identifying items on the institution's menu that are vegetarian or vegan helps students see that there is more than just a salad bar for them to eat.

### **University of Chicago**

The University of Chicago is a private not-for-profit RU/VH institution located in Chicago, Illinois. The current enrollment for the University of Chicago is 14,788 students. During the 2009 fiscal year, the institution housed 2,600 students. The average room and board price for the 2009-2010 was \$11,697 per student. This rate is flexible depending on the living arrangements.

The University of Chicago has a very unique situation for their food service. The main part of their food service operation is three dining halls, a food court and one main café. All three of these food services are contracted by Aramark. There are also four separate cafés that are operated by the student activities department. In addition to the four cafés, there are ten additional cafés that are located in ten academic departments.

These ten cafés are operated by Sugar Plum Catering. Each of the ten locations has a separate contract between the individual department where the café is located and Sugar Plum Catering. On top of the other fourteen other cafés located on the University of Chicago's campus, the University Bookstore has a café that is operated by Barnes and Noble. Out of all of these different cafés and different places to eat only the three residence hall dining centers are all-you-can-eat, and all of the cafés are a la carte. Students on a meal plan can "swipe" into any of the dining halls. The students can come and go at any time and eat all that they want. There is no limit to how many times the student can enter and exit the dining hall, so as long as the dining hall is open, the student can come and go as they please.

The primary investigator spoke with the food service director who is the Director of Operations and Communications for the three residence halls, the food court and the main café at the University of Chicago. His primary task is to oversee these three areas and to ensure that the contract with Aramark is upheld. Since the University of Chicago has a contracted food service with Aramark, Aramark is solely responsible for the contracting of food suppliers and production of food. At this particular university, Aramark contracts the majority of their food contracts to Sysco<sup>®</sup>. The University of Chicago has a specialized contract with Aramark that is specifically for vegetarian and vegan students that are on their campus. During every lunch and dinner, there must be at least one vegetarian soup and one entrée as well as one vegan soup and entrée. This is a necessity for the contract to be fulfilled by Aramark.

At the University of Chicago, the food service director is very proud of the strides that the university has taken to suit the needs of students with special dietary restrictions.

The food service director estimated that at least ten percent of their students eat only vegetarian or vegan meals. Thus, there is a sizeable portion of students that want these meals. This number is a rough estimate, because the food service director stated that there is no way of being able to tell just who eats what. The main reason why students cannot be fully counted as being a vegetarian or vegan is because of the “swipe” system. Any student that swipes into one of the dining facilities can eat as much or as little as they want at any of the stations. Therefore, all students that have a dining plan have access to the vegetarian and vegan meals. Some students that have other dietary restrictions, such as diabetes, will sometimes choose to eat from these specialty stations. In addition to their vegetarian and vegan stations at the dining centers, the University of Chicago also takes those with religious dietary preferences very seriously. At the dining facilities, there are two separate kosher stations for those of the Jewish faith. Also, a halal dish is served in at least one dining center for students. Thus, this dining system is very student centered.

The food service director stated that the best part of their food service is that they have gained the trust of the students. These students know that their vegetarian and vegan meals will not contain anything from any non-vegetarian or vegan entrées. Their food service takes cross-contamination of food very seriously. If a vegetarian or vegan dish is cross-contaminated with a non-vegetarian or vegan entrée, that one student would be extremely unhappy and the word would spread among students. Then the students’ trust in the food service would dwindle. The food service director stated, “You are only as good as your last meal, and here at the University of Chicago we see the dining experience as a community building event. If we do not facilitate our students’ dietary needs, we would not be upholding the University ideals” (Mason, 2010). This is a very

important part of their food service for the food service director and all employees of their food service.

At the University of Chicago, the food service director has developed a food service that ensures students that their food is not cross-contaminated. The system is simple: use only certain pans to make vegetarian or vegan meals and use other pans to create the non-vegetarian and vegan dishes. If the chef in the dining facility is creating a vegetarian meal, he can only cook with pans or utensils with green handles. Likewise, if that chef is preparing a vegan meal, only blue handled pans or utensils can be used. Pans that have these colored handles can only be used to prepare meals that are associated with the colors of the handles. As long as all staff abides by these regulations, there is no chance of cross-contamination.

In addition to ensuring that there is no cross-contamination, the food service professionals ensure that all students know what services and food is available to them. All student interaction is done on a one-on-one basis to ensure that the service is very personalized. First, the student meets with housing to assist the student to find the most appropriate person to speak with about the student's needs. Typically, this is the food service manager of the nearest residence hall food service. Once the correct person is identified, the student will meet with that particular food service manager to find an appropriate solution for the students' dietary needs.

The food service director attributes the development of a great food service that is very student centered to several main reasons. The first of these reasons is the idea that meal times are times for community building. If the meal time is disturbed because a student could not attain a suitable meal, then the food service is not doing its job

correctly. Another reason is student interest. These food services have identified that there is a substantial need for accommodations for students with special dietary needs at the university. This extends not only to those students that are vegetarian or vegan but to any student that has any particular dietary restriction for any reason.

The University of Chicago displays exemplary progress in suiting the dietary needs of the students at their institution. The university is not only providing meals that fulfill students' dietary needs, but they are providing a variety of foods to ensure that all students will always be able to find something to eat. Also, they are more than willing to suit any student with special dietary needs. Overall, the University of Chicago's food service in the residence halls should be used as a template for other institutions that want to ensure that their students' dietary needs are not only met but exceeded.

### **Overarching Themes in Findings**

There are many different themes that are found when comparing all of the schools information collected from this study. One of these themes is how the different food services collect data from students, faculty, and staff. Another theme that is found is the way that food services address and facilitate students' needs. There were additional findings that emerged while conducting the survey that were more specific towards specific groups of schools. All of these findings can have a significant impact on the way food service views students' food related issues.

Student data collection regarding the food service is crucial for directors of food services to assess where their food service is currently meeting student needs and where there is room for improvement. All of the schools reported to do one thing in common for collecting student data: the use of comment cards. Whether digitally or physically having

students fill out comment cards, receiving direct student opinions are good for food services. It should be noted that most food service directors stated that these comment cards were avenues for students to complain rather than give meaningful feedback about the food. One food service director stated that as long as the food was mediocre or good, students would not complain most of the time. However, if a student had a bad experience, then they would normally complain about their experience and not leave any contact information.

While it is good to know that a student had a bad experience in the food service, most food service directors felt that if they had the student's contact information it would better serve the student by conducting a follow-up call, meeting or email. This is true because the food services want to give students what they want to eat. If the food service directors cannot do a follow-up phone call or email, the food service cannot really assess the true problem or how to fix the problem. Therefore, students must get involved if they want any changes to occur in the food service.

Students' dietary needs are assessed and addressed very similarly between all of the food service directors. First, the food service is contacted by a student that is either unhappy with the current food provisions that suit them or they need something special that they cannot find on their own. Then, someone from the food service, typically the registered dietician or food service director, will contact the student to arrange a meeting for the student and the food service representative. During the meeting, the food service representative will go over the menu with the student and find if there are current provisions that will suit the student's food needs. If there are currently provisions, the food service representative will show the student what they could be eating at each dining



service, so the student has become more aware about the food choices available to them. If there are currently no provisions for the student, the food service representative is always more than willing to accommodate the student as long as the student will eat what is purchased.

There were several other findings that could prove useful for future research in this field. One of these areas is the differences between contract and self-operated food services. This subject was addressed by several different food service directors. There are advantages and disadvantages to both food service styles, but this study was not initiated to inspect the advantages or disadvantages of either contract or self-operated food services. Rather, the purpose of the study was to analyze the current provisions of food services.

Another subject that was addressed by several food service directors is the necessity for a registered dietician to be employed at the food service. Currently, this is divided between contracted and self-operated food services. With the exception of Bradley University, most contracted food services do not employ an on-campus registered dietician while most self-operated food services do employ an on-campus registered dietician. Again, this was not the intended purpose of the study, but this subject was a product of this study for future research if it is necessary for food services to employ a registered dietician.

Some of the data that were collected proved not to be relevant for this study and other data could have been collected for further research. School population size was found to be irrelevant. This is mainly because larger urban schools may not provide on-campus housing and if they do provide housing, the food service does not provide a large

quantity of meals. Also, larger urban schools are more likely to have a la-carte food services that do not require students to purchase a meal plan.

Another item that was found that was irrelevant to this particular study was the amount of money that students pay in tuition and housing. The reason why this was irrelevant was because the tuition, room, and board rates are based on many different factors. One of the largest factors for these figures is if the school is located in an urban or rural location. Those institutions that are located in more urban areas cost more to attend, live and eat than those in more rural areas. There are many other factors that cause fluctuations in prices as well, such as the type of school (e.g. public or private). The amount of revenue that each school's food service has is also extraneous for this study. Food services' revenue is dependent upon students' living in the residence halls and eating the food on-campus. Thus, it is not important for this study to compare different school's revenue to their vegetarian provisions or how the food service operates.

There were many concepts and ideas that each institution has implemented over time to suit their students' needs. All of the schools have a very unique student population and should be taken into consideration when analyzing these schools. These factors can either tie or separate all of the institutions and it is the minor changes that can make the difference in how a student views the food service.

## CHAPTER V

### Implications and Conclusions

This study was initiated to investigate the current provision that food services on college and university campuses provide their students due to a situation that involved a student that, due to a food restriction, could not eat the food that was provided. Through several meetings, this student's issue of finding a meal was resolved. From this situation, the PI began to compile research on what other institutions' food services, of similar size schools, were doing to ensure that all students are fed meals they can eat. All of the data compiled served as the basis for the cross-sectional study. The PI interviewed all of the participating institutions' food service representatives via phone with a series of questions. All of the data were compiled and analyzed.

When the present study was initiated, the results anticipated were that little or no food options for vegetarian students would be available on the Illinois campuses selected for study. The results emerging from this study were markedly different from the anticipated outcomes. Current dietary provisions at the institutions, and the level of engagement and support from food service directors and staff were much more extensive than expected. The degree of student involvement in the food selection processes at all schools was also a factor that influenced the results. Attention to students' dietary needs played a vital role in all food service operations. Finally, the interest and involvement of faculty and staff members whose jobs were not tied to the food service on a particular campus was also not anticipated.

### **Student Involvement**

Student involvement in voicing opinions about on-campus dining varied greatly among the cooperating schools. In making decisions about food provisions, some institutional representatives reported a very active student clientele. However, at other institutions, students were either not involved or only slightly interested in decisions about on-campus food provisions. There were many different ways for students to get involved on campuses, but only some food services appeared to utilize their student clientele to the fullest possible extent.

The most likely cause for students to voice their opinion about the quality of food service at any particular institution was a bad experience with food service offerings. This negative encounter was most likely their experience or one of a peer's experiences. In each case, it appeared the student took the experience and turned it into action to change what types of food were provided. The easiest way for students to get involved was to describe the experience to a staff member, or completing a food service comment card. Some students directly talked with a food service director to ensure that their experience did not occur again.

Several food service directors appeared to anticipate exactly what needed to be provided to keep the majority of students satisfied with the food service operation, and thus few negative student comments / contacts were initiated. Depending on the size of a university, another plausible reason for a lack of student involvement was that students may have felt a sense of being "lost in the crowd" if they had any issues with a dietary concern. This feeling of being the only one with a specific problem was very common on larger campuses and appeared to reduce student involvement. The food service director at

Illinois State University [ISU] stated, “Due to large student enrollment at ISU, students can feel like a number in a crowd and not want to voice their opinion.” The present study was not initiated to examine the effects of student involvement in college and university food services’ dietary options; however, the PI recognized that student involvement in dietary decisions on a college campus was vital to understanding what dietary options institutional food services should provide.

### **Students’ Dietary Needs**

One condition that did not have a direct effect on the diversity of students’ dietary needs was the location of the campus. In this study, the PI looked at the dietary needs of students that attended both rural and urban colleges and universities within Illinois. There was no evidence found to link geographical location of the school and the diversity of students’ dietary needs. At each of the schools in the study, not all schools had the same dietary provisions; however, each school displayed that their students have unique dietary needs.

### **Implications for students**

Student dietary needs were the reason this study was conducted and it is important to accurately reflect what the results mean for all students. First, students must reflect inwardly on their personal food choices. Next, students should research the food service at their institution. Finally, if there are changes that need to be made in the food services to meet student needs, students should contact the appropriate food service staff members.

Inward reflection for a student is very important to evaluate the student's exact dietary need. If a student is unsure of what their needs are, it is hard for food service personnel to suit the needs of that student. In addition, some students will limit or expand their dietary needs from time to time for various reasons. Therefore, students should know exactly what their dietary needs entail so there is no question as to what they can and cannot eat.

Research is a key component for students to understand their food service and how it works. The initial point of research for students is to find if there are current food provisions for the student's dietary needs. If there are currently no provisions that the student sees as appropriate for them, then the student should do further research about their institution. Students need to find the person that can help them with finding food that is appropriate to their dietary restrictions. Typically, this would be the institution's registered dietician or food service director. The last portion of research that a student should investigate at their institution is the current student involvement in changing the food provided on the campus. Some college and university campuses have student organizations that advocate certain dietary restrictions. Overall, students must do their own research to best understand their institution and the avenues that the student has access to obtain the food that suits the student's personal dietary needs.

If a student finds no suitable options for their dietary requirements, that student needs to contact the food service dietitian to make them aware of the lack of food for a particular dietary restriction. Students have many different ways to do this. One of the easiest ways to start a conversation to change the current food service provisions is by sending a short email to the appropriate food service staff member stating who the

student is, what their dietary restriction is, and what research they have done regarding the food service. This message will show the food service staff that they are well-informed about the food service and are not just complaining about a meal that they disliked. Based on the initial contact, the food service staff member should be more than willing to arrange a meeting with that student to discuss what can be done to help that student find appropriate meals to suit their dietary restriction.

Students also need to understand the importance of voicing their opinions and what they can do on their campus to change what is being provided. Students need to know that comment cards are not just a place for complaining. Many times food service directors see these cards as a place for students to submit complaints about the food or the hours of operation. While complaining about one particular situation is acceptable, food service directors want to know why the food was bad and what they can do to change the situation. Students need to understand that if they did not like the food being served, they need to do something about it. At Southern Illinois University in Carbondale, two students voiced their opinions about the food that was provided for the students on comment cards. After the two students met with the food service director, the food service implemented several menu changes as well as making minor changes to how the campus food service operated. This was one example of students utilizing their current means of communicating their disapproval and taking action to change the food service.

According to several of the food service directors in this study, students were more likely to talk to another student than they were to talk to a food service staff member about the food. Thus, student government organizations could appoint a student that currently serves on either the student senate or the student housing association on-

campus to be a representative for the students regarding food provisions. Ultimately, students must understand that their voice on the campus should be heard and that the food service directors are more than willing to hear what they have to say.

### **Implications for food service directors and staff members**

The present study impacts the work of food service directors for a number of different reasons. Understanding the student perspective is paramount for college and university food service directors; if they can understand the students, the food service can appropriately adjust institutional food provisions to meet student needs. The next major implication for food service directors and their staff is being able to adapt what other colleges and universities are currently doing to better serve their students.

Food service directors must do two things to ensure that students' opinions and needs for the food on-campus are assessed properly and issues handled in an appropriate manner. The first way that food service directors can do so is by being proactive in assessment and publicly displaying what avenues students have to voice their opinion about the current food provisions. Many of the food service operations assessed in this study seemed very reactive to situations rather than proactive. Food service directors frequently reacted to a student problem or issue rather than proactively seeking out students for suggested changes to be made. Based on a content analysis of the interviews, the institution most proactive about working to meet student needs was Illinois State University, where a vegetarian food station was established inside one of their food services without being prompted by any significant number of student requests. Illinois State University took the initiative to listen to a few students and made major changes in the way that the food service produced as well as displayed food options on their menu.



In this particular situation, however, maintaining this food station was very costly and relatively few students utilized the food station. The primary investigator is not suggesting that food services create all vegetarian or vegan food stations, but for food service directors to be proactive in letting students know what avenues students have available to request specialized food options.

One of the best ways to let students know about the food service, which was displayed by only a few schools, was to incorporate a presentation about the food service operation during new student orientation. During this presentation, food service directors should emphasize the importance of students voicing their opinion about the food and ways that students that have special dietary needs can contact them. As a supplement to the presentation, information booths could be maintained for at least the first week of school in each food service area to allow students to identify themselves as having any special food needs, or to ask for more information about the food that is provided.

Another proactive way that food service directors can be helpful is the way that the weekly menu is displayed. Online menus are great for students, because they can instantly look at what is being served at specific locations on campus. These menus should identify at least one vegetarian or vegan meal for each day in each dining area. The presence of on-line menus would help students that are unsure if a meal is vegetarian or vegan or not. Additionally, listing daily nutritional value information is also very good for students to maintain a healthy balance of foods. Doing so is a large task for food services due to the nature of rotating menus, but having the nutritional facts listed with the menu can be very beneficial for students with specific dietary needs. Thus, food

service directors must be intentional about being proactive to truly get students' opinions and dietary needs.

Another implication for food service directors from the present study was insight into the student perspective of food service operations. As more millennial generation students enter college and university settings, the university must change to suit their needs. One of the major components is that millennial generation students typically do not like direct confrontation or conflict (Bonner et al., 2011). Thus, moving more resources for students onto websites and email is highly important for millennial students. Interested students can obtain the information they seek and ask a question whenever the student is ready to do so. Thus, a descriptive online menu and having an email address listed for students to email is very important. Overall, student centered practices are very important for food service directors to adopt in their food service.

#### **Implications for non-dining services student affairs professionals**

The information from this research can directly impact student affairs professionals that do not know how food services operations work on their college campus. These data will help them to better understand the complexities of how the food service operation works. On most college and university campuses, dining services is a division of student affairs. Thus, all student affairs professionals should seek to understand the other divisions of student affairs. Additionally, this research gives student affairs professionals the direct knowledge of what avenues are open for students, faculty, and staff to take to change the food available on-campus. Therefore, if a student approaches a non-food service student affairs professional, that professional would know exactly who to contact to best help that student.

### **For Future Research**

The present study can be used as a basis for future research about food services in higher education. Previous research about vegetarianism tied vegetarianism to religion (Herndon, 1960), health (D'adamo, 1996, 1998), history (Olver, 2010) or ethical reasons (Hill, 1996), but no published document that was available to the primary investigator linked vegetarianism to higher education food service operations.

Due to the lack of available research in this subject area, the methodology used for this study could be enhanced in several different ways by future researchers. The first way that this research should be changed or altered is the content of questions that were asked and to whom the questions were asked. An example of this is the question that stated: "During an average day during the week in the academic year, how many entrée meals do all of the food services operations on-campus prepare?" This question was hard for food service directors to determine for several reasons. The first reason was that most colleges have a "swipe" card system. For swipe card systems, tracking what meals students choose or the quantity of meals that are eaten is not possible. Once a student swipes their card at the front of the food service, the student chooses any number of quantities of what they want to eat. Thus, food services prepare a specific amount of trays of an item, and serving sizes vary for each student. Also, food service operations produce many different meals served at many different locations, so summing across these locations simply produces an estimate of how much students will eat and not a number of entrée meals. Additionally, it is not possible for food service dieticians to determine what students consider an entrée, because some students could eat a large bowl of macaroni and cheese and consider that an entrée whereas the stated entrée at that food service point of service was something completely different.

Another question that needed revising was “During an average week in the academic year, roughly how many lacto-ovo-vegetarian entrées a week does your institution offer?” Currently, there was no institution that could easily produce this number except for two schools: Governors State University and the University of Chicago. Governors State University could produce this number only on the basis that they served two entrée meals each day and one was a vegetarian meal and the other was a non-vegetarian meal. For the University of Chicago, their contract with Aramark stated the food service company must provide at least 2 vegetarian entrée options in each dining service. Other than these two schools, collecting these data was very hard, because the food service directors could not quantify an exact number from their available data.

Future researchers may want to examine who they question as well. In the present study, the primary investigator interviewed only food service directors and / or dietitians. Food service directors’ opinions of their food service offerings could be biased towards legitimizing or promoting their own food service, so future researchers may want to expand research subjects to include students, other food service workers, and other campus stakeholders who use the food services, such as faculty and staff members.

The last way that the present researcher would suggest change for future research is the way that the data were collected. The questions asked for the purposes of the present survey were suitable for an initial research effort; however, future researchers may want to alter them to better suit their particular research objectives. Most of the questions that were asked in this survey directly related to the primary investigator’s prior experiences with working with food service operations. Gathering questions based on

student and staff food service experiences would increase the breadth of the survey and add value to the results.

Another portion of the research that should be changed or enhanced for future research is the sample of food service operations studied. The scope of the present research was very narrow and only looked at institutions that were perceived by the PI as likely to have a critical mass of vegetarian students. This study could be expanded to include all food service operations in colleges and universities inside Illinois, because some smaller schools may have a better way for food services to accommodate vegetarian students. This research could also be expanded to compare college and university food services to either the private food industry or K-12 school food services.

Appropriate data collection is critical for accurate research in any field. For this research, the primary investigator conducted phone interviews. Future researchers may want to consider different data collection techniques. Possible data collection techniques would be a face to face interview with food service directors, focus groups including several students from specific interest groups, and researcher tours of food service facilities. Another way to collect data would be to develop a quantitative instrument to accurately measure total student satisfaction of the food service at an institution.

Currently, there is no quantitative instrument that fully measures student satisfaction with institutional food service operations. The closest quantitative instrument that measures student satisfaction with the food service is an RHA end-of-the-year survey (EBI Survey). The ACUHO-I/EBI Resident Survey contains only seven limited questions regarding the food service operation. A more comprehensive instrument would seem

useful to measure student satisfaction with so important an issue as the food they consume.

Vegetarianism on college and university campuses is not a fad and will not disappear. Students will always be eating on college and university campuses. Since on-campus vegetarian and vegan students will have already paid for a meal plan, why should the food service not provide for those particular students with specialized dietary restrictions?

## APPENDIX A

### Basic Carnegie Classifications

(Source: Carnegie Foundation, n.d.)

**Associate's Colleges.** Includes institutions where all degrees are at the associate's level, or where bachelor's degrees account for less than 10 percent of all undergraduate degrees. Excludes institutions eligible for classification as Tribal Colleges or Special Focus Institutions.

- Assoc/Pub-R-S: Associate's—Public Rural-serving Small
- Assoc/Pub-R-M: Associate's—Public Rural-serving Medium
- Assoc/Pub-R-L: Associate's—Public Rural-serving Large
- Assoc/Pub-S-SC: Associate's—Public Suburban-serving Single Campus
- Assoc/Pub-S-MC: Associate's—Public Suburban-serving Multicampus
- Assoc/Pub-U-SC: Associate's—Public Urban-serving Single Campus
- Assoc/Pub-U-MC: Associate's—Public Urban-serving Multicampus
- Assoc/Pub-Spec: Associate's—Public Special Use
- Assoc/PrivNFP: Associate's—Private Not-for-profit
- Assoc/PrivFP: Associate's—Private For-profit
- Assoc/Pub2in4: Associate's—Public 2-year Colleges under Universities
- Assoc/Pub4: Associate's—Public 4-year, Primarily Associate's
- Assoc/PrivNFP4: Associate's—Private Not-for-profit 4-year, Primarily Associate's
- Assoc/PrivFP4: Associate's—Private For-profit 4-year, Primarily Associate's

**Doctorate-granting Universities.** Includes institutions that award at least 20 doctoral degrees per year (excluding doctoral-level degrees that qualify recipients for entry into professional practice, such as the JD, MD, PharmD, DPT, etc.). Excludes Special Focus Institutions and Tribal Colleges.

- RU/VH: Research Universities (very high research activity)
- RU/H: Research Universities (high research activity)
- DRU: Doctoral/Research Universities

**Master's Colleges and Universities.** Generally includes institutions that award at least 50 master's degrees and fewer than 20 doctoral degrees per year. (Some institutions above the master's degree threshold are included among Baccalaureate Colleges, and some below the threshold are included among Master's Colleges and Universities; see Technical Details.) Excludes Special Focus Institutions and Tribal Colleges.

- Master's/L: Master's Colleges and Universities (larger programs)
- Master's/M: Master's Colleges and Universities (medium programs)
- Master's/S: Master's Colleges and Universities (smaller programs)

**Baccalaureate Colleges.** Includes institutions where baccalaureate degrees represent at least 10 percent of all undergraduate degrees and that award fewer than 50 master's degrees or 20 doctoral degrees per year. (Some institutions above the master's degree threshold are also included; see Technical Details.) Excludes Special Focus Institutions and Tribal Colleges.

- Bac/A&S: Baccalaureate Colleges—Arts & Sciences
- Bac/Diverse: Baccalaureate Colleges—Diverse Fields
- Bac/Assoc: Baccalaureate/Associate's Colleges

**Special Focus Institutions.** Institutions awarding baccalaureate or higher-level degrees where a high concentration of degrees is in a single field or set of related fields. Excludes Tribal Colleges.

- Spec/Faith: Theological seminaries, Bible colleges, and other faith-related institutions
- Spec/Medical: Medical schools and medical centers
- Spec/Health: Other health profession schools
- Spec/Engg: Schools of engineering
- Spec/Tech: Other technology-related schools
- Spec/Bus: Schools of business and management
- Spec/Arts: Schools of art, music, and design
- Spec/Law: Schools of law
- Spec/Other: Other special-focus institutions

**Tribal Colleges.** Colleges and universities that are members of the American Indian Higher Education Consortium, as identified in IPEDS Institutional Characteristics.

- Tribal: Tribal Colleges



## APPENDIX B

### College/University Food Service Questionnaire

#### 1.1 Quantitative Questions

- Is the college/university that you work for Public or Private? (Public or Private)\*
- What is the highest degree program that your institution offers? (Associates, Bachelors, Masters or Doctorate)\*
- How many full-time students did your institution enroll in the 2008 – 2009 academic year?\*
- Is your food service on-campus self-operated or externally-operated?\*
- What is the total dollar amount of purchases/revenue for last year?\*
- How many students are currently on a board plan?
- Who is the supplier for the food service on-campus?
- During the academic school year, how many food service operations does your institution operate?
- What are the different types of food services operated on-campus?\*
- Are the dining centers all you can eat or a la-carte?
- During an average day during the week in the academic year, how many entrée meals do all of the food services operations on-campus prepare?
- During an average week in the academic year, roughly how many lacto-ovo-vegetarian entrées a week does your institution offer? How many “make your own meal” stations that are lacto-ovo-vegetarian does your university operate during an average week?

#### 1.2 Qualitative Questions

- Does your institution currently provide any special accommodation for vegetarians? If so, please describe what your institution does to accommodate vegetarians?

- Does your institution currently conduct (a) food satisfaction survey(s) or (a) method(s) of feedback? If so, would you be willing to provide the latest survey(s)?
- If you have a student with special food needs, how do you accommodate his/her needs?

All questions with an \* denotes a question that is answered from either the Illinois Board of Higher Education's or National Association of College and University Food Service's websites

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