FOOD SENSITIVITIES AND ACCOMMODATIONS FOR
LOGISTICS AND ACQUISITION EMPLOYEES WITHIN GOVERNMENT AGENCIES

MSA 699 Project Report

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for the Degree of
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Executive Summary

This project provided an analysis and evaluation of the food sensitivities and accommodations for logistics and acquisition employees within government agencies. The problem statement was that food services within government agencies are not providing acceptable accommodations for employees who have food sensitivities. When accommodations are not made for food sensitivities, there is a potential negative impact on job performance of employees. The overall research plan was comprised of the following three research objectives:

- Research Objective #1: To determine the major food sensitivities that employees have within the workplace,
- Research Objective #2: To evaluate the impact of food sensitivities on employee job performance in the workplace, and
- Research Objective #3: To make recommendations to the management of government agencies relative to food sensitivities and accommodations to improve the job performance of employees.

The three research objectives were addressed using the following two research questions and one research hypothesis:

- Research Question #1: What are the major food sensitivities that employees have within the workplace?
- Research Hypothesis #1: Food sensitivities experienced by employees have a positive impact on employee job performance in the workplace.
- Research Question #2: What actions should the management of government agencies take relative to food sensitivities and accommodations to improve job performance of employees?
The methods of analysis included the collection of primary data and analyzing the primary data. The data collection addressed the sample size, sampling plan, measurement level of data, survey instrument, and pre-test of survey instrument. Originally, one hundred respondents were the original goal, but after one hundred eight respondents took the survey, twenty-two of the respondents were not eligible to be part of the research. Seven steps of hypothesis testing were included in the data analysis plan. The findings verified that there was indeed an issue among the food sensitivities and accommodations in the workplace. Few organizations had the policies for food sensitivities and allergies set in the place for their employees. This study found that not having food accommodations had a negative impact on job performance of the employees of government agencies or private companies supporting the government organizations. The recommendations from this study for the management of government agencies relative to food sensitivities and accommodations included:

- Setting up food policy or regulations at the workplace,
- Adding healthy selections to the vending machines, if applicable,
- Adding healthy options for the employees with food sensitivities and allergies in the cafeteria,
- Removing food allergens that could be very severe or life-threatening for the employees, and
- Adding a lunch or break room for the employees.
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Chapter 1

Definition of the Problem

Introduction

More than two thousand years ago, a Greek physician, Hippocrates, researched the ways in which food could cause health problems for people (Lundy, 2007). However, there was a not sufficient number of individuals who were aware of the food allergies. King Richard III of England in 1483 ate some strawberries and had an allergy reaction, which was a skin rash, so “he accused [Lord William Hastings] of putting a curse on him [and] demanded his head on a plate” (Auckland Allergy Clinic, 2001). He had no idea that it was a natural disease that affected him. The people were not aware of food allergies until around the 1800s when hay fever was first acknowledged by the doctors (Auckland Allergy Clinic, 2001). After this point, awareness of several food allergies began to grow, so that the people could better control what they eat or substitute an ingredient with another one. Some allergies could be deadly enough to send the affected people to the hospital. Others were not too severe, so most of the time, the symptoms went away quickly. Today, more individuals are aware of their food sensitivities and allergies than before.

Food sensitivities and allergies could affect how the Americans performed their jobs. About 125 million Americans are currently employed on a full-time basis (Bureau of Labor Statistics, 2017). About 15 million Americans, including 5.9 million children under 18, have food allergies (Food Allergy Research & Education, 2017). It is estimated that there are more than 20 million employees who work for federal, state, and local governments in the United States (Jeffrey, 2015). The Food Safety Modernization Act (FSMA) was signed into law by President Obama on January 4, 2011, and ensured that “the U.S. food supply is safe by shifting
the focus from responding to contamination to preventing it” (U.S. Food & Drug Administration, 2017). It enforced one of the rules, which was preventive controls; “these measures are required to ensure that hazards requiring a preventive control will be minimized or prevented. They include process, food allergen, and sanitation controls, as well as supply-chain controls and a recall plan” (U.S. Food & Drug Administration, 2017). However, not all of them provided the accommodations for their employees with food sensitivities and allergies.

**Problem Statement**

Today, most government agencies have implemented both cafeterias and restaurants in the same building or on the same base so employees have the places to go and eat during their lunch breaks. However, what they did not realize was that some of their employees likely had food sensitivities and allergies. When the employees are worried about what is inside the food that their employers provided because they do not know what it was made of, it could have affected their job performance. They would have to check the ingredients on the food products every time or bring their own lunches. “A food allergy may be considered a disability under current federal laws, such as Section 504 of the Rehabilitation Act of 1973, Title I of the Americas with Disabilities Act of 1990 (ADA), and the ADA Amendment Act of 2008” (Food Allergy Research & Education, 2017). According to one of the research articles, “A more recent study conducted…stated that 16% of Californians reported being ‘allergic or unusually sensitive to everyday chemicals.’ There were no specific questions on symptoms other than a list of products or situations “bothering” or making individuals ‘sick’” (Joffres, 2001). Often, in the workplace, the foods that were brought in were usually homemade or were taken out of the packages or boxes, so they did not have labels and ingredients. Food services within government agencies were not providing acceptable accommodations for employees with food sensitivities.
When accommodations were not provided for those with food sensitivities, there was a potential negative impact on job performance of employees.

**Scope**

This study was conducted at the government agencies and private companies all over the country. In order to collect the data, the researcher provided the survey for the employees who worked for the logistic teams at a Naval Agency under Department of Defense through e-mail distribution. The number of employees in the logistics teams was at least twenty. The researcher also used one of the social media, Facebook, to distribute the survey and to reach out to four hundred twenty-five people who worked for the government agencies and private companies in the United States. All of the responses in the survey were anonymous. The researcher was pursuing this study because without food accommodations, the employees with food sensitivities and allergies might not perform at their jobs as well as those without the sensitivities and allergies.

**Overall Research Plan**

**Research Objectives**

The first research objective was to determine the major food sensitivities that employees have within the workplace. By using the sources and the data collected from the survey, the researcher analyzed and pinpointed what the major food sensitivities were. The second research objective was to evaluate the impact of food sensitivities on employee job performance in the workplace. The impact of food sensitivities on employee job performance was one of the critical discussions because the government agencies and private companies depended entirely on how their employees performed. The third research objective was to make recommendations to the management of government agencies relative to food sensitivities and accommodations to
improve the job performance of employees. Those recommendations benefited not only the government agencies, but also their employees. If the employees received the food accommodations, then they would be able to perform their jobs much better.

**Research Hypothesis/Research Questions**

The first research question was: What are the major food sensitivities that employees have within the workplace? The researcher planned to receive the data from the sources and the survey about the main food sensitivities in the workplace. The research hypothesis was that food sensitivities experienced by employees had a positive impact on employee job performance in the workplace. The researcher also looked to gather the data about how well the employees could perform their job even if they had food sensitivities. Sometimes the employees with food sensitivities could perform their job as well as those without the food sensitivities. The second research question was: What actions should the management of government agencies take relative to food sensitivities and accommodations to improve job performance of employees? This question was very critical to the research, because if the management of government agencies took action to improve the employees’ job performance, then the employees would be more satisfied and happier.

**Decision Criteria**

The decision criteria included the quantitative data, which were based on the survey and the past data from the sources. The awareness of food allergies from at least a decade ago could be completely different than today. The data included the demographic and research questions about how severe each individual’s food sensitivity could be and about how it would affect their job performance. Once the entire data had been gathered, each question from the survey was in the percentage by using gender, age, education level, which government or private company they
worked for. This data helped the government agencies and organizations make the decisions and recommendations about how they could accommodate the needs of their employees with food sensitivities.

**Summary List of Assumptions**

1. At least one hundred of four hundred twenty-five respondents would take the survey and answer all of the questions.
2. The survey respondents were the employees at government agencies or private companies supporting the government agencies.
3. Some of the agencies or employers already had food accommodations for their employees with food sensitivities and allergies.

**Summary List of Limitations**

1. Some of the respondents who took the survey might not have been employees, so they would be exempted from the data.
2. Some of the respondents might have skipped a few questions or quit in the middle of the survey, leaving the form incomplete.
3. Not all of the respondents had the same opinions about the food accommodations and might have provided a different result than expected.
4. Less than one hundred respondents might have taken the survey; less than expected.

**Summary**

Food allergies and sensitivities have been around for a long time, likely since the ancient Chinese and Egyptian times. The people other than scientists and researchers started gaining awareness about those food allergies and sensitivities a few decades ago. This research project focused on how the government agencies and private companies provide food accommodations
for their employees and what they could do to improve them. The researcher collected the data and research through the sources and distributed the survey to the employees who worked for either government agencies or private companies. Without the food accommodations, the job performance of the employees might be significantly impacted.
Chapter 2

Literature Review

Introduction

There were several factors regarding food issues that could affect the job performance of employees who worked for government agencies and private companies. The literature review starts with the history of food allergies and sensitivities and further discusses this literature review discusses how the historians first noted that the people from the ancient times were already having food allergies and sensitivities. Going through the history into the present day, the regulations and laws were established specifically for schools, workplaces, and public places. However, the regulations and laws were not perfect, and the employees were still being affected by their food sensitivities and allergies, which could have impacted their job performance. There were several workplaces that could provide food accommodations for their employees; however others unfortunately did not. In all, this chapter explores the history of food allergies and sensitivities, food allergy regulations, the impact of food allergies and food sensitivities in the workplace, food accommodations, and previous research studies.

History of Food Allergies and Sensitivities

In terms of the early history of food allergies and sensitivities, there were a few cases regarding food allergies and sensitivities from the ancient periods. King of Menses of Egypt died from a wasp sting, and Roman Emperor Caludius’ son, Britanicus, developed rashes because he was allergic to horses (Achoo Allergy, 2017). Back then, they did not know that allergies existed. Secondly, King Richard III of England had a strawberry allergy, but he was not aware of it until he developed rashes after eating the strawberries (Auckland Allergy Clinic, 2017). Lastly, a Greek physician named Hippocrates studied and researched about how food allergies affected
people over two thousand years ago (Lundy, 2007). Since then, more physicians and doctors began to acknowledge that “food can cause health problems” (Lundy, 2007). Because of those cases, several researchers and scientists from the ancient times either discovered the allergy or developed a drug to treat an allergy (Auckland Allergy Clinic, 2017). From there, “historically, physicians were recognized for being able to treat their patients’ illnesses by diet manipulation. That means that throughout history, doctors treated illness by changing a patient’s diet” (Lundy, 2007). Because of those cases during the ancient times, people back then did not know that they had allergies or sensitivities, so the doctors and researchers went on to discover treatments for those with allergies.

Going into the late 1800s and early 1900s, it was completely different compared to the past, because technology was also evolving; thus it also affected how people handled their food. For example, processed food and refrigerators for storing foods could last longer than before (Lundy, 2007). The Food and Drug Administration (FDA) was first established in 1862 under the Department of Agriculture in order to protect the consumers from “adulterated and misbranded food and drugs” (U.S. Food & Drug Administration, 2017). It was not officially named as the Food & Drug Administration until 1930 (U.S. Food & Drug Administration, 2017). As of 2017, “its jurisdiction encompasses most food products (other than meat and poultry), human and animal drugs, therapeutic agents of biological origin, medical devices, radiation-emitting products for consumers, medical, and occupational use, cosmetics, and animal feed” (U.S. Food & Drug Administration, 2017). Under the FDA, one of the food safety laws, the Food Safety Modernization Act (FSMA), was “signed into law by President Obama on January 4, 2011” (U.S. Food & Drug Administration, 2017).
**Food Allergy Regulations**

Some of the reasons why the food-related regulations and laws were established were because of adulteration and misbranding (Curtis, 2013). The food laws were established to ensure that consumers got what they paid for and to ensure that the food was safe (Curtis, 2013). The Food Safety Modernization Act “aims to ensure that the U.S. food supply is safe by shifting the focus from responding to contamination to preventing it” (U.S. Food & Drug Administration, 2017). Basically, it gave the Food and Drug Administration the authority to protect the Americans from food safety problems, to respond to food safety issues in an instant, and to improve the food safety (National Sustainable Agriculture Coalition, 2009). The Act provided the rules for preventive controls for human food, produce safety, accredited third-party certification, foreign supplier verification programs, and more rules (U.S. Food & Drug Administration, 2017). The rule of preventive control for human food “sets requirements for a written food safety plan that includes hazard analysis, preventive controls, and oversight and management of preventive controls” (U.S. Food & Drug Administration, 2017). The purpose of the food regulations and acts was to prevent the Americans from consuming inedible foods.

There were a few regulations and acts that were specially intended for the people with food sensitivities and allergies. Food Allergy Research & Education, Inc. (2017) discussed the law and regulations, food allergy basics, allergens, diagnosis and testing, and treatment and managing reactions. There were certain regulations and acts for specific places, such as schools, universities, public places, restaurants, and medical services (Food Allergy Research & Education, 2017). For this research, the regulations and rules for the workplace were addressed. In a workplace in general, “a food allergy may be considered a disability under current federal laws” (Food Allergy Research & Education, 2017). Those federal laws included Section 504 of
Food Sensitivities and Allergies Impact on Workplace

Today, food sensitivities and allergies are becoming more concerning in workplaces. Unfortunately, “most employers do not currently have policies or procedures in place for managing employees with food allergies” (Moore, 2016). For example, there was a case where the John Muir Health hospital was sued by and agreed to pay $340,000 to eight healthcare workers who had life-threatening latex allergies (Burwell, 2013). There were several ways that could cause the employees to react badly to food, whether it was through oral or exposed by the environment. In one of the studies, “skin injury could directly alter the immune environment of the gastrointestinal tract, facilitating sensitization by oral rather than epicutaneous allergen exposure” (Blazquez, 2016). Because of some severe cases, “the organization agreed to revise its policies ‘to ensure safeguards against potential latex-related disability discrimination’” (Burwell, 2013). It is an increase in health concerns like this that have been more and more prevalent in many other organizations today.

Most of the articles and sources discussed were not only about food sensitivities allergies, but also unhealthy food having a negative impact on the job performance and work productivity of the employees. Some of the major food sensitivities and allergies, such as lactose intolerance or strawberry allergy, also have impacts on the employees’ performance within the workplace. The most common food allergies are eggs, fish, milk, nuts from trees, shellfish, soybean, and wheat (Nordqvist, 2017). If an employee gets sick because of their food sensitivity or allergy, he
or she will not be able to do his or her job properly and will likely be sent home to recover. By removing certain ingredients that cause the allergic reactions, it will not only positively affect the employees with food sensitivities, but also those without. Even the employees in other countries like South Korea, believed that “government agencies must develop policies regarding prevalence of food allergies in Korea” (Ju, 2015). By improving the food policy and accommodations and setting up the food regulations for the employees, the management of government agencies would receive positive results of the overall job performance of their employees.

Abdelmassih (2015), a student in a doctoral program at Iowa State University, wrote a dissertation about food allergy accommodation policies in colleges and universities. She wrote about how life-threatening food allergies were and about how to minimize the risk of reactions (Abdelsmassih, 2015). Without providing accommodations, the individuals at the colleges and universities with food allergies were at the risk of having severe reactions (Abdelsmassih, 2015). Her purpose of the dissertation was to “investigate organizational cultures that may influence food allergy accommodation behaviors and policies in [colleges and universities]” (Abdelsmassih, 2015). This study was referenced in one of the questions in the survey instrument in Appendix A as well as Chapter 4. Some employees were likely to want to know what was inside the food before purchasing them due to their religion, practice, or culture.

**Food Accommodations**

Because of the Americans with Disabilities Act Amendment of 2008, “the employer is obligated to engage in an ‘interactive process’ with the employee to discuss whether there is a reasonable accommodation that would enable the employee to perform the essential functions of his or her position” (Burwell, 2013). Basically, “the ADA prohibits a firm from harassment,
coercion, or retaliation against an employee who invokes their ADA rights, or helps others invoke theirs” (Marshall, 2014). The employee was also responsible to alert their employer about their food allergy, so that the employer “can take a few steps to reduce their employees’ risk of exposure to food allergens” (Renaud, 2016). With the food accommodations in place for people with allergies at the workplace, they “typically require more creativity, time, and flexibility than money to execute” (Marshall, 2014). There were some examples of how food accommodations could lead to increased morale, production, and satisfaction of the employees because the employees could perform their job better.

Other countries have also produced research regarding food allergies in workplace. In Canada, for instance, Moskal (2011) studied about healthy food Policies in the workplace. She explained in her article that, in Canada, most of foods sold in vending machines and cafeterias at the workplace often consisted of high fat, high sugar, and high salt foods (Moskal, 2011). “Healthy workplaces can lead to increased employee morale, productivity, and job satisfaction” (Moskal, 2011). Moskal provided advice with several ways for the workplace to support healthy eating. For example, the individual could “talk with [their] employer about offering healthy options” or “request that healthy food and beverage choices be available at meetings or at company-catered meals” (Moskal, 2011). With a workplace healthy food policy, the morale of the workplace would improve.

Unfortunately, sometimes the employers either ignored or did not care about the food issues in the workplace. There was one case where a manager at Panera LLC thought it would be hilarious to tease his own employee with a peanut allergy by leaving peanut butter outside his office and then was sued for violating “Title VII of the Civil Rights Act of 1964 by allowing harassment against him based on his food allergies” (Renaud, 2016). Sometimes eating at work
could also be a complicated issue for some of the employers (Magloff, 2017). The U.S. Occupational Safety and Health Administration (OSHA) did not provide any specific rules, but some of their regulations did “require employers to evaluate any workplace risks or safety hazards, including those that involve food” (Magloff, 2017). However, there were a few ways to improve the employee morale at the workplace. “Providing food-related perks can raise employee morale and also help to keep employees onsite or at their desks for longer periods, reducing the time employees spend at lunch or on break” (Magloff, 2017). Healthy eating was also very important because “healthier employees can translate into lower health insurance costs, higher productivity and less absenteeism” (Magloff, 2017). If the businesses were to listen to their employees regarding the food issues, they would improve not only their morale but also job performance.

For another instance, Wanjek (2005) discussed food safety and food security and emphasized the issues about the lack of nutrition. Without proper nutrition, “nearly a billion people [all over the world] are undernourished, and one billion are overweight or obese” (Wanjek, 2005). There were so many symptoms, such as iron deficiency, that affected the work productivity. “Common symptoms in adults include sluggishness, low immunity, low endurance and a decrease in work productivity for mental and repetitive tasks” (Wanjek, 2005). One of his sources from 1996, United States Department of Health and Human Services (DHHS) stated that “nutrition promotion offers numerous benefits for a company, including decrease in absenteeism, decrease in staff recruitment and training costs through reduced staff turnover, reduction in the number of worker compensation claims and gains in productivity through improved health and morale” (Wanjek, 2005). Wanjek (2005) explained that the proper nutrition and solutions “boosted employee morale and productivity; reduced the number of accidents and sick days;
saved on long-term costs of health care; promoted the good name of the employer; and/or increased national gross domestic product (GDP) or tax revenue.”

**Previous Research Studies**

Sometimes the employees in the workplace could develop a little or severe reaction to foods in an outside environment even though they were not consuming them. In one of the research studies, the environmental sensitivities affected individuals to “experience symptoms that cause varying levels of dysfunction” (Joffres, 2001). One of those environmental sensitivities was food (Joffres, 2001). The most common environment sensitivity for food was peanuts. In one of Joffres’ results (2001), the women were more affected compared to the men. (Joffres, 2001). Another environmental factor was also a sociocultural issue. Even though the employees had food sensitivities and allergies, sometimes they did not want to pressure their employers into providing food accommodations or were tempted into consuming foods that they were not supposed to. Those sociocultural factors also affected food and eating habits (Devine, 2007). In one of the studies which were conducted by Devine and four other researchers, “the goal of this analysis was to conduct formative research to design a socially feasible, culturally acceptable, and methodologically sound intervention trial for weight gain prevention at a large manufacturing company” (Devine, 2007). In the study, “respondents were aware of and able to articulate specific educational, ecological, administrative policy, and environmental targets for weight gain prevention intervention within their work areas” (Devine, 2007). In other words, the respondents in Devine’s study had already known about how the polices at their workplace worked but at the same time, they had already accepted them even though they might not receive the accommodations as they needed. There was a similar study as Devine’s, which was conducted by Geaney and other several researchers (2013). This time, Geaney and the other
several researchers (2013) discussed the food choices at workplace with the intervention using a controlled trial. The purpose of the study was “to assess the effectiveness and cost-effectiveness of complex dietary inventions focused on environmental dietary modification alone or in combination with nutrition education in large manufacturing workplace settings” (Geaney, 2013). They believed that a few factors affected the dietary behavior, such as individual, environment, society, biology, and psychology (Geaney, 2013). The result that they were looking for was “changes in dietary behaviors, nutrition knowledge, health status with measurements obtained at baseline and at intervals of 3 to 4 months, 7 to 9 months and 13 to 16 months were recorded” (Geaney, 2013). Basically, they were looking to see if the individuals were affected by a change in the way they ate.

How the foodservice operations ran also had an impact on the employees. For example, two researchers, Choi and Rajagopal (2013), studied about how well the foodservice employees at a university knew about food allergies while they were handling and preparing the meals. “All foodservice employees bear the responsibility of ensuring that the food served to their customers is safe, particularly, foods prepared and served to patrons with food allergies” (Choi, 2013). Choi and Rajagopal (2013) used a questionnaire to gain data from forty-two undergraduate students as a research design. They found in their results that “respondents were knowledgeable about what a food allergy is and how to handle customers with food allergies; however, most respondents were not knowledgeable about the top eight food allergens from a given list of allergens and the use of injectable epinephrine in case of a severe food allergic reaction” (Choi, 2013). In other words, even though the foodservice employees knew about food allergies, they were not too familiar with the specific ingredients and food allergens.
Summary

A couple of the articles about the history of food sensitivities and allergies explained about how the people first discovered them and started developing treatments and drugs to improve their health and lifestyle. Some of the other reference sources came from a few government websites, such as U.S. Food & Drug Administration, that provided the food regulations and food safety guidelines for the workplace. While there was no official law for food safety and accommodations at the workplace, they were still one of the disabilities, which could often be used to enforce the Americans with Disabilities Act. Other sources provided the research and case studies about food allergies that affected the employees, and how the employers could provide the food policy and accommodations for their employees. The overall research methodology for this research project is summarized in Chapter 3.
Chapter 3

Research Methodology

Introduction

The research methodology is comprised of the data collection plan, which addressed primary data, sample size, sampling plan, measurement level of data, survey instrument, pre-test of survey instrument, and reliability and validity. Primary data were collected using a survey for the respondents who worked for either government agencies or private companies supporting the government agencies. The primary data were evaluated using hypothesis testing. This research project addressed the impact of the food sensitivities and allergies on the job performance of employees in the workplace.

Data Collection Plan

Primary Data

The researcher distributed the survey about the food sensitivities and accommodations for logistics and acquisition employees. The survey was voluntary, so the respondents could quit the survey at any time. The survey required approximately five minutes to complete. The survey was distributed at a government workplace and through a media, Facebook. The purpose of this survey was to gather data to evaluate the impact of food sensitivities on employee job performance. The information was used to make recommendations to government organizations in regard to the employees’ food sensitivities and appropriate accommodations to provide improved job performance.

The data from the sources discussed a few issues, such as the workplace not providing food accommodations for its employees. It also included a brief review of not only food sensitivities and allergies but also the workplaces that provided food accommodations. The
sources came from the scholarly articles, blogs, and news articles. The data were also gathered from the social and news media.

**Sample Size**

Four hundred twenty-five respondents from all over the United States were invited to take the survey. The survey was voluntary. The acceptable sample size was at least one hundred respondents who are the employees of the government agencies or private companies supporting the government organizations. The respondents must be employed and at least 19 years old. The respondents could either have or have no food allergies.

**Sampling Plan**

When the survey ended, the respondents were analyzed by the researcher to see if they were eligible for this study. If the respondents did not work for government agencies or private companies supporting government organizations, they were deleted from the research project. If the respondents chose not to complete the survey, they were not included in the research. The respondents with or without food allergies and sensitivities who both worked for government agencies or private companies supporting government agencies and completed the survey were included in this research project. The researcher believed that even if the respondents did not have any food allergies and sensitivities, they were also very critical and provided valid responses to the survey.

**Measurement Level of Data**

The researcher used nominal and ordinal measurement levels in the survey. According to Zikmund (2012), the Likert-scaled questions were ordinal but can be treated as interval measurement level. The data were categorized using the demographic questions, such as gender, that were answered by the respondents for the comparison using percentages. By using the 1-7
Likert scale, the respondents rated the severity of their food sensitivities or allergies, which were categorized as lactose intolerance, gluten intolerance, fructose intolerance, salicylate intolerance, celiac disease, enzyme deficiencies, food allergy, and others.

**Survey Instrument**

The survey instrument in Appendix A was used to collect the primary data. The survey instrument included demographic questions, categorical questions using the nominal measurement level, and Likert scaled questions focused on the severity of food allergies and the impact of food allergies on job performance.

**Pre-test of Survey Instrument**

The researcher conducted a pre-test of the survey instrument with eight respondents from a graduate research class and received feedback from them. Only one of them had a few food sensitivities. They commented that they liked how the option “prefer not to answer” was included in the questionnaire. The researcher also edited and revised a few questions for further clarification. A couple of questions were added. One of the questions that was added was “Do you have children?” because some of the parents at their workplace might have been exposed to certain food allergies that they could bring home and cause health issues for their children. The second question added was “Do you think with the food accommodations, you will be happier and perform your tasks happier” which could address one of the research objectives about evaluating the impact of food sensitivities on employee job performance in the workplace.

**Reliability/Validity**

After the pre-test with eight respondents, the researcher determined that the results were reliable and valid. Even though six out of eight respondents did not have any food sensitivities or allergies, all of the respondents agreed that the government agencies and private companies
FOOD SENSITIVITIES AND ACCOMMODATIONS

should ensure that their foodservice operations provide food accommodations. Two of the respondents had a few food sensitivities. Six respondents did not have any food sensitivities. One respondent commented that they would have more energy and would feel at ease knowing the food they consumed would not give him or her a stomach ache. Her response showed how food sensitivities and allergies could affect the employees’ job performance.

Data Analysis Plan

Hypothesis Test Steps

1. Determine the null and alternative hypotheses:
   
   H0: \( \mu \geq 6 \)
   
   H1: \( \mu < 6 \)

2. Determine the level of significance:
   
   \( \alpha = .01 \)

3. Determine the test statistic:
   
   \[ Z \text{ calculated} = \frac{X - \mu}{s/\sqrt{n}} \]

4. Determine the critical value:
   
   Z critical value = -2.33

5. Make calculations from sample data. (See Chapter 4)

6. Make statistical decision. (See Chapter 4)

7. State conclusion and make recommendation. (See Chapter 5)

Summary

In summary, the researcher collected primary data using a survey. The sampling plan only included those respondents with or without food allergies and sensitivities who completed the survey and worked for either government agencies or private companies supporting
government organizations. If the respondents did not complete the survey or did not work for
government agencies or private companies, they were omitted from this research project. The
pre-test of the survey assisted the researcher to edit and revise the survey instrument by
clarifying and adding a few more questions and including one more 1-7 Likert-scaled question.
For the data analysis plan, hypothesis testing was used. The actual data analysis for this study is
summarized in Chapter 4.
Chapter 4

Data Analysis

Introduction

The purpose of this research project was to determine if there was an impact on job performance of employees due to food services within government agencies not providing acceptable accommodations for employees who had food sensitivities. The data were collected for this project in response to the problems that were discussed in Chapter 1. This study was quantitative research, because it included the evaluation of primary data using hypothesis testing. One hundred eight respondents took the survey. However, only eighty-eight completed the survey, and the remaining twenty-two respondents either did not complete or quit in the middle of the survey. The response rate was 88%.

After reviewing the answers from those twenty-two respondents, they were either unemployed, did not work for government agencies or private companies supporting government agencies, or did not have any foodservice operations at their workplace, thus they did not continue with the survey. Using the valid survey data, the research objectives about major food sensitivities, the impact on employee job performance, and recommendations to the management were achieved. The literature review in Chapter 2 was also used to evaluate the problem statement as well as achieve the research objectives. The results in Chapter 4 supported the theory and literature as described in Chapter 1 and Chapter 2.

Summary of Data Collected

Demographic Categories

The demographic questions helped ensure that respondents were the valid survey group. The respondents were first asked if they worked for government agencies or private companies
supporting the government organizations, because the researcher wanted to ensure each respondent was eligible to be part of the research project. After reviewing all one hundred eight respondents, only twenty-two responses were omitted from the research project, because they were either unemployed or did not work for government agencies or private companies supporting these government agencies. Even though 34 respondents selected “Other” as their answer, they were eligible to be part of this research project, because they worked for companies, including public schools, which also had foodservice operations like a cafeteria.

The next few figures are displayed below from the demographic questions in the survey. Figure 1 showed that 34.09% of the respondents worked for the government, 27.27% worked for private companies, and 38.64% worked for other organizations that were also eligible to be part of the study.

![Figure 1. Type of Organization](image)

In Figure 2, 36.36% of the respondents were male, 62.5% were female, and 1.14% preferred not to answer, so female respondents were twice the number of male respondents. Figure 3 displayed that the highest percentage of people who took the survey were 26-35 years old at 62.5%. The second highest percentage was of people who were 36-45 at 15.91%. For the
last demographic question, the results in Figure 4 showed that 1.14% completed high school, 28.41% had some college, 44.32% had Bachelor’s Degrees, and 26.14% had Master’s Degrees.

**Results Regarding Food Sensitivities and Allergies**

Thirty-four out of eighty-eight respondents had food sensitivities and/or allergies. Fifty-four respondents (61.36%) did not have any food sensitivities or allergies. Only three out of eighty-eight respondents (3.41%) had food restrictions due to their religions or religious practices. Table 1 data helped achieve one of the research objectives, which was to determine the
major food sensitivities that employees have within the workplace. It also showed the rate of how severe the respondents’ food sensitivities and allergies were. The food sensitivity with the highest number of people was lactose intolerance, which was at 37 respondents (42.05%). However, the food sensitivity with the highest number of most severe rating was food allergy, which was 3 respondents (3.41%). The average percentage of respondents who had no sensitivity at all was 76%.

Seventy-four respondents (84.09%) answered the question “Does your organization sell any kind of food that helps with your sensitivities or allergies?” with “No.” The data indicated that the majority of the government agencies and private companies supporting the government agencies did not provide proper food accommodations for their employees with food sensitivities and allergies. For the next question, “Do you pack your own lunch or go out for lunch, because the foodservice operation at your organization does not sell the accommodations to help with your sensitivities and allergies?”, 71 out of 88 respondents (80.68%) answered with “Yes.” This result also backed the previous question about selling food at the foodservice operation and again validated the problem statement.
Table 1. Rate of Severity of Food Sensitivities and Allergies

<table>
<thead>
<tr>
<th></th>
<th>No Sensitivity (1)</th>
<th>Not very severe (2)</th>
<th>Not severe (3)</th>
<th>Not somewhat severe (4)</th>
<th>Neutral (5)</th>
<th>Somewhat severe (6)</th>
<th>Severe (7)</th>
<th>Very severe (8)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactose intolerance</td>
<td>57.95%</td>
<td>6.82%</td>
<td>3.41%</td>
<td>2.27%</td>
<td>7.95%</td>
<td>14.77%</td>
<td>5.68%</td>
<td>1.14%</td>
<td>88</td>
</tr>
<tr>
<td>Gluten intolerance</td>
<td>72.73%</td>
<td>1.14%</td>
<td>6.82%</td>
<td>3.41%</td>
<td>10.23%</td>
<td>3.41%</td>
<td>1.14%</td>
<td>1.14%</td>
<td>88</td>
</tr>
<tr>
<td>Fructose intolerance</td>
<td>78.41%</td>
<td>2.27%</td>
<td>2.27%</td>
<td>4.55%</td>
<td>6.82%</td>
<td>3.41%</td>
<td>1.14%</td>
<td>1.14%</td>
<td>88</td>
</tr>
<tr>
<td>Salicylate intolerance</td>
<td>85.23%</td>
<td>0.00%</td>
<td>3.41%</td>
<td>2.27%</td>
<td>6.82%</td>
<td>0.00%</td>
<td>2.27%</td>
<td>0.00%</td>
<td>88</td>
</tr>
<tr>
<td>Celiac disease</td>
<td>87.50%</td>
<td>1.14%</td>
<td>1.14%</td>
<td>1.14%</td>
<td>6.82%</td>
<td>2.27%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>88</td>
</tr>
<tr>
<td>Enzyme deficiencies</td>
<td>82.95%</td>
<td>0.00%</td>
<td>3.41%</td>
<td>2.27%</td>
<td>5.68%</td>
<td>4.55%</td>
<td>0.00%</td>
<td>1.14%</td>
<td>88</td>
</tr>
<tr>
<td>Food Allergy</td>
<td>67.05%</td>
<td>3.41%</td>
<td>3.41%</td>
<td>2.27%</td>
<td>5.68%</td>
<td>10.23%</td>
<td>4.55%</td>
<td>3.41%</td>
<td>88</td>
</tr>
<tr>
<td>Other(s)</td>
<td>80.68%</td>
<td>1.14%</td>
<td>1.14%</td>
<td>4.55%</td>
<td>5.68%</td>
<td>4.55%</td>
<td>0.00%</td>
<td>2.27%</td>
<td>88</td>
</tr>
</tbody>
</table>

Respondents’ Thoughts about Food Accommodations within Workplace

Figure 5 showed the number of respondents who thought their organizations should provide food accommodations, such as adding gluten-free snacks to the vending machine or adding lactose-free and gluten-free meals or requests to the menu in the cafeteria. Seventy-one out of eighty-eight respondents (80.68%) definitely thought so. The other seventeen respondents (19.32%) did not think that way and responded “No.”

The respondents rated two questions for how strongly they agreed or disagreed. The first question in Table 2 was “The current food service operations, which does not provide food accommodations, has a positive impact on job performance.” The data showed that forty respondents (45.45%) were neutral, but the next highest percentage was that twenty-eight respondents (31.82%) somewhat agreed, agreed, or strongly agreed with the statement. However, the results for the second question “How strongly do you agree or disagree that providing food
accommodations to employees who have allergies or food sensitivities would improve the employees’ job performance” conflicted with the first question “How strongly do you agree or disagree that the current food service operations, which does not provide food accommodations, has a positive impact on job performance?” because sixty-nine respondents (78.41%) either agreed with the second question compared to twenty-eight respondents (31.82%) who agreed or were neutral with the first question. The researcher believed that there was a possibility that the respondents either misunderstood the first question or missed the words “does not.” The second question (survey question 12) responses were used to address the problem statement and conduct the hypothesis test.

Seventy-three respondents (82.95%) believed that, with the food accommodations, they would be happier. Sixty-five respondents (73.86%) believed that, with the food accommodations, they would perform their job tasks better. All eighty-eight respondents (100%) answered the last question: “What would be the impact on your job performance if your organization took positive actions to address your food sensitivities/allergies?” Most of the respondents had different answers to the question, mostly about how positively it would impact on their job performance.
Table 2. Rate How Strongly You Agree or Disagree to the Questions

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat disagree (3)</th>
<th>Neutral (4)</th>
<th>Somewhat agree (5)</th>
<th>Agree (6)</th>
<th>Strongly agree (7)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The current food service operations, which does not provide food accommodations, has a positive impact on job performance.</td>
<td>6.82% 6</td>
<td>10.23% 9</td>
<td>5.68% 5</td>
<td>45.45% 40</td>
<td>9.09% 8</td>
<td>18.18% 16</td>
<td>4.55% 4</td>
<td>88</td>
</tr>
<tr>
<td>Providing food accommodations to employees who have allergies or food sensitivities would improve the employees’ job performance.</td>
<td>4.55% 4</td>
<td>1.14% 1</td>
<td>1.14% 1</td>
<td>14.77% 13</td>
<td>21.59% 19</td>
<td>31.82% 28</td>
<td>25.00% 22</td>
<td>88</td>
</tr>
</tbody>
</table>

One of the respondents commented that they “would have more stable energy and be more productive throughout the day.” Another respondent felt safer if their company provided accommodation for all staff. Some other respondents believed that the food accommodations would make the employees healthier and less stressful. One of the respondents also commented, “Not only does it show inclusion, if I forget my lunch one day, I would not need to leave the facilities or go hungry, therefore making me more attentive.” A few other respondents believed that they would be more motivated to perform their job. Overall, the comments from the respondents helped achieve the second research objective, which was to evaluate the impact of food sensitivities on employee job performance in the workplace.

**Hypothesis Test Steps**

The null hypothesis, H0, was that when food accommodations were made for food sensitivities, there was a positive impact on job performance of employees using the data for survey question 12. The equation for the null hypothesis was $H0: \mu \geq 6$, using a seven-point
Likert scale (see Appendix A). The data came from the sampling group of respondents with or without food allergies and sensitivities who worked for either government agencies or private companies supporting government organizations. The alternate hypothesis, $H_1$, on the other hand, was that food sensitivities experienced by employees had a positive impact on employee job performance in the workplace. The equation for the alternate hypothesis was $H_1: \mu < 6$.

The level of significance was $\alpha = .01$. To determine the test statistic, the formula $Z$ calculated was $X - \mu / s/\sqrt{n}$. The $Z$ critical value was determined as -2.33. First, the number for the sample size was 88 respondents. The mean was calculated for survey question 12. The mean for survey question 12 was 5.43, with a standard deviation of .93. So, $Z$-calculated was -5.7. Since the $Z$-calculated was less than the $Z$ critical value of -2.33, the null hypothesis was rejected.

Even though the null hypothesis was rejected, the researcher concluded that “when food accommodations were made for food sensitivities, there was a positive impact on job performance.” The conclusion was drawn for these reasons. First, the data from the open-ended questions validated the research conclusion. Second, there were thirteen respondents who were “neutral” to survey question 12. Third, the literature review provided considerable support for the research hypothesis.

**Summary**

In the summary, the data analysis was determined whether there was a potential positive impact on job performance of employees if they were provided with food accommodations or not. The overall research data confirmed the research hypothesis. The research conclusions and recommendations are founded in Chapter 5.
Chapter 5

Summary, Conclusions, and Recommendations

Introduction

The purpose of this research project report was to validate that when accommodations were made for food sensitivities, there was a positive impact on job performance of employees. To evaluate the problem statement, there were three research objectives, which were, to determine the major food sensitivities that employees have within the workplace, to evaluate the impact of food sensitivities on employee job performance in the workplace, and to make recommendations to the management of government agencies relative to food sensitivities and accommodations to improve the job performance of employees. The researcher developed two research questions and a research hypothesis. Again, the research hypothesis was that food sensitivities experienced by employees have a positive impact on employee job performance in the workplace if their organizations were providing food accommodations. One of the research questions was, “What are the main food sensitivities that employees have within the workplace?” The second question was, “What actions should the management of government agencies take relative to food sensitivities and accommodations to improve job performance of employees?”

Summary

The problem statement for this research project was that “Food services within government agencies were not providing acceptable accommodations for employees with food sensitivities. When accommodations are not provided for employees with food sensitivities, there was a potential negative impact on job performance.” Three research objectives were used to address the problem statement. The three research objectives were achieved using two research
questions and one research hypothesis. A sample of eighty-eight employees provided valid responses to the survey questions.

In the demographic section of Chapter 4, the results were divided into four demographic categories: types of organization, gender, age, and highest level of education. The survey results showed that more people worked for organizations other than government and private companies, but in their comments, their organizations still supported the government agencies. The number of women who took the survey was higher than the number of men. As for the results of age, most of the respondents who took the survey were in the age range of 26-35 while the number in the age range of 19-25 was the lowest. The level of education with the highest number of respondents was Bachelor’s Degree, which was no surprise.

For the results regarding the respondents with food sensitivities and allergies, only thirty-four of the respondents had food sensitivities and/or allergies. Over 84% of the respondents answered that their organizations did not sell any kind of food that helped with their sensitivities or allergies. Over 80% of the respondents thought organizations should provide food accommodations. A 1-7 Likert scale was used for two survey questions (Question 11 and 12). Survey question 12 provided the most valid responses, when 56% of the respondents agreed that providing food accommodations to employees who have allergies or food sensitivities would improve the employees’ job performance. Over 82% of the respondents answered “yes” to the next question which asked if they would be happier with the food accommodations. More than 73% of the respondents believed that they would perform their job tasks better if their organizations provided food accommodations.
Conclusions

The main research conclusion was that when organizations provide food accommodations for food sensitivities and allergies, the job performance of these employees improved. The major food sensitivities were lactose intolerance, food allergy, and gluten intolerance. Other sensitivities, such as fructose intolerance, salicylate intolerance, celiac disease, enzyme, and other sensitivities, were also included. As mentioned in Chapter 2, not too many organizations have policies or procedures for their employees with food sensitivities and allergies (Moore, 2016). In Chapter 4, a few respondents commented that they would feel safer if their organizations provided food accommodations and established food regulations. Others also mentioned that they would feel less stressed and more motivated if they knew what was in the food that they were consuming. One respondent made a comment, “Increased productivity because I don’t have to worry about what other people might bring into my work environment.”

Again, the main food sensitivities that employees have within the workplace were lactose intolerance, food allergy, and gluten intolerance. They are the most common problems regarding food sensitivities in the country. The research hypothesis was that food accommodations had a positive impact on employee job performance in the workplace. Some data collected contradicted the hypothesis. But, this research concluded that job satisfaction improves when government agencies provide food accommodations for employees.

Recommendations

Improve the job performance of employees, the following recommendations are provided by the researcher to the management of government agencies relative to food sensitivities and accommodations.
1. Set up food policy or regulations at the workplace. In Chapter 2, Wanjek (2005) explained that a lack of proper food safety and security would lead to a decrease in work productivity and an increase in sick days. If the employees were healthy, the cost of health care would decrease, and employee morale would be boosted.

2. Add healthy selections to the vending machines if applicable. The employees with food sensitivities and allergies would have more options to select from the vending machines. The researcher noted that Moskal (2011) believed that with healthy food options, employee morale, productivity, and job satisfaction would be increased.

3. Add healthy options for the employees with food sensitivities and allergies in the cafeteria. Lactose-free and gluten-free meals would greatly help the employees with lactose and gluten intolerances. It would be a great start, because lactose and gluten intolerances were the most common food sensitivities in the United States.

4. Remove food allergens that could be very severe or life-threatening. Due to the Americans with Disabilities Act and Amendment Act of 2008, the employers are required to provide reasonable accommodations because of the risk of exposure to food allergens.

5. Add a lunch or break room. If the employers could not provide food accommodations due to any valid reasons, adding a break room with strict food policies or regulations would also greatly help the employees with food sensitivities and allergies.

**Future Research Recommendations**

The researcher believes that, in future research, only respondents with food sensitivities or allergies should be included in the survey and those without should be omitted from the research. It would provide better and more solid data for the research. The employees with food sensitivities and allergies would be more familiar with the questions and provide better and more
valid answers. In Chapter 2, the researcher noted that Magloff (2017) stated that the employees knew how to go around their food sensitivities and allergies by sitting in the break rooms by themselves or eating at their own desks.

The question that was removed from this survey should be changed to “The current food service operations, which do provide food accommodations, have a positive impact on job performance.” This revised question is highly recommended to be included in the future research. Any future researcher should look further into the food policies, regulations, and laws not only because of misbranding, because many organizations were not aware of the laws and regulations.

**Study Contribution**

This study had been conducted by previous researchers. Four researchers did the study in “Environmental Sensitivities: Prevalence of Major Symptoms in a Referral Center: The Nova Scotia Environmental Sensitivities Research Center Study” on how the environmental sensitivities, which also included foods (Joffres, 2001). Basically, they discussed major symptoms from the environmental sensitivities that caused dysfunction (Joffres, 2001). In the article titled “Food allergy knowledge, attitudes, practices, and training of foodservice workers at a university foodservice operation in the Midwestern United States,” two researchers Choi and Rajagopal (2013) did a questionnaire with the foodservice employees and found in their results that even though their respondents were not familiar with food allergens, they still knew what a food allergy was and did what their customers with food allergies requested. Thirdly, in the research of Devine (2007) and four other authors, even though it was not about food sensitivities and allergies, unhealthy food options still had an impact on the employees’ job performance.
Lastly, Geaney (2013) analyzed how effective a controlled group would be with the dietary intervention by providing nutrition education in the workplaces.

Those studies were conducted in different ways but had the same goal as the researcher for this research project. This study was to analyze how the employees with food sensitivities and allergies were affected by the food choices within their organizations. All of the previous studies, except Choi’s, did not do a survey or questionnaire. The researcher believed that it was important to include the survey data, because with the recent data, many organizations did not have any food regulations in the workplace. That could greatly affect the employees’ performance in their workplaces.
References


@dcomm/@publ/documents/publication/wcms_publ_9221170152_en.pdf.
FOOD SENSITIVITIES AND ACCOMMODATIONS

Appendix A

Survey Instrument

FOOD SENSITIVITIES AND ACCOMMODATIONS FOR LOGISTICS AND ACQUISITION EMPLOYEES

Instructions:

1. The purpose of this survey is to evaluate the impact of food sensitivities on employee job performance. Since you are an employee in a government logistics and acquisition organization or work for a private company supporting the government organizations, you are requested to participate in the survey. The information will be used to make recommendations to government organizations and private companies in regards to the employees’ food sensitivities and appropriate accommodations to provide improved job performance.

2. The survey questions will require approximately 5 minutes to complete.

3. All survey responses will be anonymous. Please do not include your name.

4. This survey is strictly voluntary. You may quit the survey at any time.

5. Please click on the most correct response for each question in the online survey.

6. Please answer all questions as honestly as possible.

Demographics:

Please check the most appropriate answers for each question.

1. What type of organization do you work for?

   □ Government
   □ Private Company
   □ Other: ________________

2. What is your gender?

   □ Male
   □ Female
   □ Prefer Not to Answer
3. What is your age?

☐ 19 - 25
☐ 26 - 35
☐ 36 - 45
☐ 46 - 55
☐ Over 55
☐ Prefer Not to Answer

4. What is your highest level of education?

☐ High School
☐ Some College
☐ Bachelor’s Degree
☐ Master’s Degree
☐ Doctorate’s Degree

5. Do you have children?

☐ Yes
☐ No

Survey Questions:

6. Do you have food sensitivities, allergies, or restrictions due to your religion or practice?

☐ Yes
☐ No

If you answered Yes to question #6, please proceed to Question #7. If you answered No, please proceed to question #9.
7. Please circle and rate the severity of your food sensitivities or allergies for the following categories:

<table>
<thead>
<tr>
<th></th>
<th>No Sensitivity</th>
<th>Not very Severe</th>
<th>Not Severe</th>
<th>Not somewhat Severe</th>
<th>Neutral</th>
<th>Somewhat Severe</th>
<th>Severe</th>
<th>Very Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactose intolerance</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Gluten intolerance</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Fructose intolerance</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Salicylate intolerance</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Celiac disease</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Enzyme deficiencies</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Food Allergy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Other(s):______</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

If you selected “No Sensitivity” to all items in question #7, please skip the questions #8 and #9, and proceed with question #10.

8. Does your organization sell any kind of food that helps with your sensitivities or allergies?

☐ Yes
☐ No

If you answered Yes to question #8, please skip the question #9.

9. Do you pack your own lunch or go out for lunch, because the cafeteria at your organization does not sell the accommodations to help with your food sensitivities?

☐ Yes
☐ No

10. Do you think your organization should provide food accommodations such as adding gluten-free snacks to the vending machine or adding lactose-free and gluten-free meals or requests to the menu for your cafeteria?

☐ Yes
☐ No
Please circle and rate how strongly you agree or disagree to the following questions:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>The current food service operations, which does not provide food accommodations, has a positive impact on job performance.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Providing food accommodations to employees who have allergies or food sensitivities would improve the employees' job performance.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Do you think with food accommodations, you will be happier?
- [ ] Yes
- [ ] No

14. Do you think with the food accommodations, you will perform your job tasks better?
- [ ] Yes
- [ ] No

15. What would be the impact on your job performance if your organization took positive actions to address your food sensitivities?

Thank you for participating in this survey.