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# Food Allergies Abroad: An Exploration of the Experiences Individuals with Food Allergies Face While Studying Abroad

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**Food Allergies Abroad: An Exploration of the Experiences Individuals with Food Allergies Face While Studying Abroad**

Danielle Roberge

PIM 73

A Capstone Paper submitted in partial fulfillment of the requirements for a  
Master of Arts in International Education

SIT Graduate Institute in Brattleboro, Vermont, USA

Advisor: David Shallenberger

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Student Name: Danielle M. Roberge

Date: March 31, 2017

## **DEDICATIONS**

This research is dedicated to my parents, Kenneth Roberge and Melissa Roberge. I would like to thank them for teaching me to take responsibility for my food allergy, for pushing me to be a self-advocate, and above all for encouraging me to travel.

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**ABBREVIATIONS**

ADAAA: Americans with Disabilities [Act] Amendments Act

ADA: Americans with Disabilities Act

DOJ: Department of Justice

FAAN: Food Allergy & Anaphylaxis Network

FARE: Food Allergy Research and Education

IgE: Immunoglobulin E

MSG: Monosodium Glutamate

SECUSS-L: Listserv for Education Abroad Professionals

SIT: School for International Training

### **ABSTRACT**

Food allergies are a life-threatening medical condition that can result in a potentially fatal allergic reaction known as anaphylaxis. Food allergies affect roughly 15 million United States citizens and this number is growing, currently there is no cure. Young adults are most at risk to experience this life-threatening reaction. As more students with food allergies are entering colleges and universities to pursue a higher education, they are also becoming increasingly interested in studying abroad; however, there are few resources available. This research paper aims to explore the various challenges those with food allergies experience while studying abroad. To understand these challenges, we will first look at various laws surrounding food allergy accommodations and what institutions of higher education are doing in response to the growing number of students with food allergies. We will also explore research that has been done regarding traveling with food allergies and studying abroad with chronic illness. It became apparent that little research has been done specifically on studying abroad with food allergies. In this research, sixteen individuals with life-threatening food allergies participated in a survey where they recounted their experiences managing their food allergies while abroad. Of the sixteen, six participants agreed to a follow-up interview where they recounted in detail their experiences.

## INTRODUCTION

*“Most of us eat without a thought that something so essential to life might also harm us. But for people who are allergic to one or more foods, every mouthful can be a worry”*

*(National Institute of Allergy and Infectious Disease. P. 4. Para.1).*

It is estimated that about 15 million United States citizens and 17 million Europeans (data unavailable for other continents) suffer from life-threatening food allergies according to one of the major food allergy support groups known as Food Allergy Research and Education (FARE). Food allergies can be fatal, accounting for roughly 200,000 emergency room visits every year. A food allergy occurs when an individual's immune system identifies certain food proteins as harmful and reacts to these food proteins in an extreme manner. This reaction is known as anaphylaxis, which is a severe allergic reaction that can result in death in just a matter of minutes. The symptoms of anaphylaxis are hives, swelling of the lips and face, vomiting, diarrhea, cramping, weak pulse, drop in blood pressure, difficulty breathing, loss of consciousness, and death. The only way to reverse the symptoms of an anaphylactic reaction is by an injection of epinephrine, a type of adrenaline. After receiving an epinephrine injection, individuals should always go to the emergency room for additional medication in case symptoms of anaphylaxis reoccur. There are eight foods responsible for 90% of food-related anaphylaxis in the United States and those foods are eggs, wheat, tree nuts, peanuts, fish, shellfish, soy, and milk. Currently, there is no cure; strict avoidance of the allergen is essential (Food Allergy Research and Education. 2008).



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Since there is no cure, food allergies often become a lifelong medical condition that affects the individual on a daily basis. “The need for constant vigilance to avoid particular food allergens, the need to carry adrenaline auto-injectors, and the fear of anaphylaxis, all impact on the food allergic individual’s social life, emotional wellbeing and quality of life” (Barnett, Botting, Gowland, & Lucas. 2012. Para. 1). As food is a necessity, typical life experiences become difficult due to anxiety issues, advanced planning, and quick decision-making on the part of the allergic individual.

The term “food allergy” is often incorrectly used to describe any food-related issue; it is important to make a distinction between food allergies and food intolerances. There are many types of intolerances; for example, lactose intolerance is a result of not having the correct enzymes to digest the milk sugar known as lactose. This does not engage the body’s immune system, does not result in an immediate life-threatening emergency, nor does it require the same vigilance.

Another food-related issue that is commonly included in the term “food allergy” is celiac disease. Celiac disease is a serious autoimmune disease that can result in significant long-term damage and chronic poor health. Due to the serious long-term effects, those with celiac disease must avoid gluten. Those with food allergies and those with celiac disease have much in common, and often share resources regarding food avoidance, however, the reaction in celiac disease does not result in anaphylaxis and therefore the management of celiac disease can be different from that of a food allergy. It is interesting to note that the number of those living with celiac disease has increased as well (Murray, Van Dyke, Plevak, Dierkhising, Zinsmeister, & Melton. 2003).

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This paper will explore the experiences individuals with food allergies have while studying abroad. My interest in this topic stems from my personal experience with food allergies. I was diagnosed with a life-threatening milk allergy at six weeks old and have had to learn how to manage my food allergy in addition to the normal challenges of growing up. When I was sixteen years old I participated in my first international exchange program in Paris, France. I brought two suitcases, one full of clothes and one full of non-perishable food items. I was going to stay with a host family and I was afraid they wouldn't understand my food allergy concerns. I was also afraid I would not be able to find safe foods due to the language difference and the cultural food preferences of butter and cheese. Since then, I have participated in multiple study abroad programs, have traveled to five continents, and currently live in Spain, all while managing my food allergy.

I have spoken at several national food allergy conferences on the topic of traveling with food allergies. Over time, I have noticed that there seems to be a fear of international travel in the food allergy community. Since my involvement in the field of international education and study abroad, parents of students with food allergies, study abroad professionals, and food allergic students have asked me for advice on managing food allergies while abroad. There appear to be few resources on the topic and often I have no more than personal experience to pull from. According to Food Allergy Research and Education (FARE), young adults are at the highest risk for anaphylaxis. Since college students are in this age group, is it important that colleges and universities become aware of these issues and accommodate these students appropriately (Food Allergy Research and Education. 2008).

## LITERATURE REVIEW

To explore food allergies in study abroad, we first need an understanding of what colleges and universities are doing to respond to the increasing number of young adults with food allergies pursuing a higher education. For many students, it is their first time living alone and managing their food allergies. In 2008, President Bush signed the Americans with Disabilities Act Amendments Act (ADAAA) that expanded the definition of disability. “According to DOJ [Department of Justice] guidance, some food allergies may be protected under the ADAAA depending on the severity of the allergy. Students ‘with more significant or severe responses to certain foods’ such as difficulty swallowing and breathing, asthma, or anaphylactic shock—may be recognized as having a disability as defined by the ADA” (Trotch. Para. 7). According to these laws, a disability is defined as, “a physical or mental issue that seriously limits one or more major life activities. Life activities include things like your heart and circulatory system, eating and your digestive system, breathing and your respiratory system, and more,” (Food Allergy Research and Education. 2008. Para. 4). FARE recommends that students, who are eligible, apply for accommodations under Section 504. This is another form of protection a student with food allergies may request so that the school accommodates the disability (Food Allergy Research and Education. 2008).

At the end of 2012, a food allergy related settlement in higher education occurred between the Department of Justice (DOJ) and Lesley University, a private university located in Cambridge, Massachusetts. This settlement was a milestone, paving the way for schools and students with food allergies to work together for an overall better college

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experience. A student who suffered from celiac disease filed a complaint with the DOJ claiming the school, Lesley University, did not meet the standards of accommodation spelled out in the ADA. Lesley University agreed to cooperate with an investigation and rewrite their disability policy to provide better accommodations for those with food allergies and celiac disease. These accommodations included providing students with the choice to opt-out of a meal plan. If the student chose to stay on the meal plan, the school would provide students with nutritionally equivalent allergen-free meals ensuring to the best of the University's ability that no cross-contamination occurs. Accommodations also included installing a dedicated area for students with food allergies as a safe space (United States Department of Justice Civil Rights Division. 2012).

With the number of food allergies increasing, several states have passed legislation specific to colleges and universities allowing their health centers to stock prescribed epinephrine auto-injectors. This means that institutions of higher education would be able to have epinephrine on hand to use for any student exhibiting symptoms of anaphylaxis. Other states have passed laws allowing any public venue to stock epinephrine, including institutions of higher education (Food Allergy Research and Education. 2008).

*Allergic Living Magazine* included an article entitled, "Off to College With Allergies, Celiac," by Patrick Bennett. The article discusses the experiences of several food allergic students in college. "Susan Leavitt shuddered at the thought of [her son] leaving home one day to go to university. The idea of a young man at risk for anaphylaxis eating mass-prepared food in a huge dining hall alongside hundreds of students seemed unfathomable" (Bennett. 2014. Para.1). Susan's son, David, is allergic to milk, nuts, fish, and shellfish and appears to have had a successful experience managing his food allergies

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at the University of Delaware. David would meet with the university's executive chef each week to discuss the dining service menu and they agreed that David would only eat food directly from the kitchen to minimize the risk of contamination. Most of the time his food was similar to what the other students were eating but occasionally he would be accommodated with higher quality food than the others. Another student named Elizabeth, who must avoid gluten, dairy, and eggs, enjoyed a similar service. Her school, Boston College, in addition to weekly meetings with the head chef, agreed to purchase specialty items for her to take from the cafeteria. She recently graduated and feels that she ate better in college than she does post-graduation (Bennett. 2014).

While these stories are examples of what institutions of higher education can do for their food allergic students it is important to note that, "... not all colleges are on board yet, and not every student is going to be lucky enough to get the personal chef treatment" (Bennett. 2014. Para. 8). Dhanalakshmi, a student who must avoid wheat at the University of Pittsburg, had a rough start to her first semester of college. There was only one place where she could find wheat-free food items, but she often had reactions due to cross-contamination. She recalls losing a lot of weight that semester and had to go through other channels to get safe food, such as befriending the manager of a campus convenience store who would stock special food for her (Bennett. 2014.).

A blog post written by myself in 2013 entitled, "'Murvill` & Milk,'" describes my experience managing my food allergy as a freshman in college. I attended a small private liberal arts college next to the Great Smoky Mountains in East Tennessee. I was unconvinced that the school could accommodate my allergy in the cafeteria so my parents and I decided it would be best if I declined the meal plan and cooked my food on

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a George Forman grill in the dormitory kitchen. I knew that freshmen were required to be on a meal plan, but thought they'd make an exception for me as I had a medical excuse. I made an appointment to speak with the Director of Food Services and requested not to be on a meal plan. I was met with firm resistance and was not allowed to opt-out of the meal plan. "He proceeded to explain to me that while all students are required to have a meal plan, it is especially important for freshmen because it is a way to encourage social activity and friendship... I learned quickly that this meeting was not one in which I would be able to sway him, it was one where he had planned to tell me what he thought without letting me speak" (Roberge. 2013. Para. 6). It is important to note that I started college in 2007 and food allergies were not covered by the ADA at the time. (Roberge. 2013).

Unfortunately, my dormitory had a dysfunctional kitchen that was not safe for a student with food allergies and I developed a strange eating pattern that my roommate called, "...eating like a bear... I was basically eating as much as I could to prepare for a period of time without food, much like a bear does before they hibernate." (Roberge. 2013. Para. 9). By the time my sophomore year came, the ADA had been passed and I was able to request special accommodations. I applied to live at one of the prime apartments typically reserved for upperclassmen with a high GPA. These apartments were off campus, which allowed me to opt-out of a meal plan, and provided a full kitchen for me to use and share with only one other person. Having my own kitchen made a significant difference on my health and wellbeing (Roberge. 2013).

In rereading my blog I discovered a sentiment I had long forgotten. "My mother begged me to request a room with a kitchen but I did not want to. It would have meant leaving my roommate with whom I had become close. I wanted to live in the dark and

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dingy freshman dorms because I wanted to have the typical freshman experience. Yes, the community showers were gross and staff [sic] infections were common, but I wanted that experience because it meant I was normal” (Roberge. 2013. Para.10). Ten years later, it is hard to relate with the girl who wanted to be normal so much that she sacrificed her health.

Fortunately, various food allergy support groups and students with food allergies are helping to improve accommodations in higher education. Food Allergy Research and Education (FARE) launched their FARE College Food Allergy Program in 2014 with the intention of improving the safety and quality of life for college students with food allergies. This comprehensive program includes educational opportunities to train staff in disabilities services, dining services, and resident life. It creates standard guidelines for colleges and universities to use towards implementing services for students with food allergies, creates resources for students with food allergies pursuing a higher education and improves access to food allergy accommodations in colleges and universities. In addition to this initiative, FARE is creating a database for prospective students where colleges and universities can post information about how they accommodate students with food allergies. This database is expected to be available this year, 2017 (Food Allergy Research and Education. 2015).

FARE also has two guidelines, one for prospective students with food allergies and one for current students with food allergies. The guideline for prospective students helps students choose their future schools with recommendations on how to speak with disabilities services, dining staff, and residence life about how each school would be able to manage food allergies. The guide for current students reiterates the importance of

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working with disabilities, dining, and housing services. Both guidelines emphasize the importance of self-advocacy and taking personal responsibility for the food allergy. It is very important for students to understand that they need to be their own self-advocates. An article in *Allergic Living* states, “no matter how flexible an institution may be, if a student isn’t proactive about communicating his or her needs, it’s impossible to work out a custom solution. One thing *Allergic Living* consistently heard from college staff was that very few students with food allergies actually ask for assistance. Whether they’re shy, not wanting to cause a fuss, guessing about allergen avoidance or just unused to asking, it’s imperative that they learn to speak up” (Bennett. 2014. Para. 38). In addition to their student resources, FARE has a proposed set of guidelines intended to help colleges and universities accommodate the needs of students with food allergies. These guidelines are being piloted by 35 colleges and universities in the United States (Food Allergy Research and Education. 2015).

The article, *Strategies that peanut and nut-allergic consumers employ to remain safe when traveling abroad*, written by Barnett, Botting, Gowland and Lucas, claims to be one of the first studies that explores the tactics those with life-threatening allergies use while traveling abroad. This study focused on 32 individuals from the United Kingdom with Immunoglobulin E (IgE) mediated responses to peanut and tree nut protein, meaning their blood cells reacted to the introduction of these proteins indicating a life-threatening allergy. The results of this study show that the presence of a food allergy was often a determining factor in their ability to travel; the research pointed out four areas of concern (Barnett, Botting, Gowland, & Lucas. 2012).



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The first area of consideration for these individuals was destination of travel. Many participants indicated that they prefer to travel to other English-speaking nations, or nations where they had familiarity with the local language to minimize risk. Many participants also avoided areas of the world where they perceived increased risk based on local diet. For example, many peanut and tree nut allergic individuals prefer to avoid places like Thailand because of the use of peanuts and tree nuts in the local cuisine. A few participants reported not traveling abroad and preferring to stay in the United Kingdom to minimize risk (Barnett, Boting, Gowland, & Lucas. 2012).

Participants also indicated a second concern related to air travel and the popularity of nuts as an in-flight snack. Both positive and negative experiences were reported, from in-flight staff making announcements to the passengers to alert them of the presence of a food allergic individual on the flight, to asking permission before serving nut-related snacks, etc. Other individuals reported negative experiences such as being served nuts even after informing the airline about the allergy. Some individuals preferred not to alert the airline for fear of an overly cautious response from the flight attendants. The length of the flight often determined how the individual handled their allergy on board, some preferring to bring their own food from home (Barnett, Boting, Gowland, & Lucas. 2012).

Access to medical care was also indicated as a third concern for those traveling abroad with food allergies. Many individuals reported that they would choose travel destinations that were close to medical facilities and would research the quality of healthcare prior to travel. Several participants indicated that they would not partake in an activity if it meant traveling to a remote location far away from a medical facility. The

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article gives an example of a woman who did not accompany her husband to Kenya because she was concerned she would be too far away from a medical facility in the event of an allergic reaction (Barnett, Boting, Gowland, & Lucas. 2012).

Lastly, familiarity of destination was a large factor in determining where those with food allergies traveled as well. If a participant had a positive experience in one destination, they were likely to return to the same destination where they felt comfortable regarding their allergy. Nevertheless, unfamiliarity with the destination did not prevent others from traveling. Participants reported relying on translation cards with important phrases written in the local language (Barnett, Boting, Gowland, & Lucas. 2012).

One participant indicated that she carries six epinephrine auto-injectors with her when she travels, while she normally carries only two. She also carries in her suitcase a first aid kit with tools she may need to subdue an allergic reaction and wears a medical alert bracelet for emergency responders. Several participants reported eating a restricted diet while traveling to avoid accidental exposure to tree nuts and peanuts. This means eating plain foods like rice and not eating anything unfamiliar. Several participants also indicated eating foods only bought in a grocery store where they could read ingredient labels. Language barriers became an issue as several participants reported it as a significant challenge if they could not read the labels (Barnett, Boting, Gowland, & Lucas. 2012).

While the above article achieves its goal of exploring the issues those with peanut allergies face abroad, it fails to explore how individuals with other food allergies manage abroad. It is important that all life-threatening food allergies are studied as not to give more importance to one. Depending on the allergen of the individual, coping techniques

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can change. This same article also focuses mainly on short-term travel, which requires different coping techniques than a study abroad.

GoAbroad, a company that offers resources for both study abroad professionals and students interested in going abroad, offers a comprehensive guideline entitled, *Meaningful Travel Tips and Tales: Health & Chronic Illness Abroad*. Many of the tips and suggestions apply to those with food allergies. GoAbroad points out that, "... the dominant narrative in travel and international education needs to shift to be more inclusive, and look outside the lens of your typical go-getter, able-bodied, happy-go-lucky, nothing-ever-goes-wrong traveler" (GoAbroad. 2016. Para. 3). They discuss a variety of chronic illnesses and important things to consider, such as taking medication through customs, handling travel insurance, and navigating a different healthcare system. They emphasize the importance of communicating with doctors, both at home and away, as well as the universities and program providers involved. GoAbroad also discusses how students with chronic illnesses can volunteer, teach, and work abroad. They are realistic in terms of the students' ability and maintain that it is important to discuss international travel with a doctor to determine if study abroad can be a reality. They state that some volunteer programs may refuse an individual based on health concerns (GoAbroad. 2016).

An article written by Emma Rattenborg for Goabroad.com, *Survival Kit: Studying Abroad with a Food Allergy*, gives helpful recommendations for those who want to study abroad with a food allergy. The article emphasizes talking to a medical professional prior to studying abroad, doing ample amounts of research on the local food culture to determine if the location is a safe option, and exploring the various study abroad

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providers to determine which will be able to provide the best accommodations. They suggest bringing enough medicine (epinephrine auto-injectors, antihistamines, asthma inhalers, etc.) to last the whole trip, in case these medications are not available in the host country. They also stress the importance of knowing the local language, or at least knowing enough to be able to explain the allergy, ask about ingredients, and communicate healthcare needs in the case of an emergency, and having access to travel insurance (Rattenborg, 2016).

They acknowledge that an important component of managing a food allergy abroad is living accommodations. While homestays are a popular option because they allow students to have a first-hand look into local life, this may not always be the best option for those with food allergies. Some students choose homestays and feel comfortable communicating their dietary needs; however, many students look for an apartment where they have access to a kitchen to cook their own food. It is equally important for the student to alert their study abroad program provider, and discuss how the allergy may impact various activities and daily life (Rattenborg, 2016).

There are surprisingly few resources available for students with food allergies interested in studying abroad. Personal accounts written in online blogs and magazines make up the majority of information available. The article, *Survival Kit: Studying Abroad with a Food Allergy* and GoAbroad's *Meaningful Travel Tips and Tales: Health & Chronic Illnesses Abroad* may be the best resources available for those with food allergies. It is interesting to emphasize out that both these articles come from GoAbroad, an organization dedicated to making studying abroad accessible to all, and not FARE,

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one of the major food allergy support networks. This highlights the necessity for further research in this field.

## **RESEARCH METHOD**

To explore food allergies in study abroad, a survey was created with 32 questions. The first seven questions asked specifics about the participant's food allergy to determine the severity of the allergy. If a participant indicated that they did not experience anaphylaxis to the food(s) they listed, or have a current prescription for an adrenaline auto-injector, they were determined to not have a food allergy resulting in anaphylaxis and did not qualify for the research. The subsequent questions asked about the study abroad experiences, preparation prior to studying abroad, experiences during study abroad, reflections after study abroad, and various support received. The survey was distributed through various channels such as SECUSS-L, FARE, and social media outlets like Facebook and LinkedIn. See Appendix A.

Participants were asked if they would be willing to participate in a follow-up interview. Those who were interested were asked to provide their e-mail address. Fourteen participants stated they would be interested in a follow-up interview. After contacting those who provided their e-mail, seven follow-up interviews were completed (one of whom did not have a life-threatening food allergy). The interview questions were designed to delve deeper into the topics covered by the survey and allowed the participants to provide further information. These follow-up interviews were conducted via Skype and FaceTime. See Appendix B.

A major limitation in this research is that the occurrence of food allergy is more common in children and adolescents than in adults (Food Allergy Research and

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Education. 2008). This means there are fewer adults with food allergies who have studied abroad available to participate in this research; however, this number is growing.

Another limitation is the common misconception of the term “food allergy”; several participants who completed the survey did not have a life-threatening food allergy as defined previously; therefore, were not included in the research. Several participants listed multiple allergies and indicated they experienced anaphylaxis, however, in the follow-up interviews one participant mentioned that not all the foods she checked off in the survey led to anaphylaxis. If a survey participant indicated multiple allergies, and indicated anaphylaxis but declined a follow-up interview, there is a possibility that not all the allergens listed result in anaphylaxis. In retrospect, it would have been important to ask participants to only include the food(s) that result in anaphylaxis.

This research has been reviewed and approved by the School for International Training (SIT) Study Abroad Local Review Board or SIT Institutional Review Board. The participants were informed of their rights and gave consent for the use of their survey and interview responses for this research. To protect the identity of the participants, no names or identifying factors have been used. The retelling of an individual’s experiences abroad has remained true. See Appendix C.

### FINDINGS

Eighteen participants completed the survey. Two participants did not meet the qualifications of the research because their responses did not indicate a life-threatening food allergy. Of these, one individual identified as a vegan and the other individual, who appeared to suffer from celiac disease, listed various foods as allergens but did not indicate having experienced anaphylaxis to these foods. As previously stated, celiac disease is a serious autoimmune disease that can result in significant long-term damage and chronic poor health, however, the reaction does not result in anaphylaxis; therefore, the management of celiac disease can be different from that of a food allergy. This individual did indicate that at one point they experienced anaphylaxis with strawberries, but did not mention this allergy elsewhere in the survey and did not indicate strawberries as an allergen when asked in the survey. It is important to note that these individuals indicated using much of the same coping strategies as those with life-threatening food allergies.

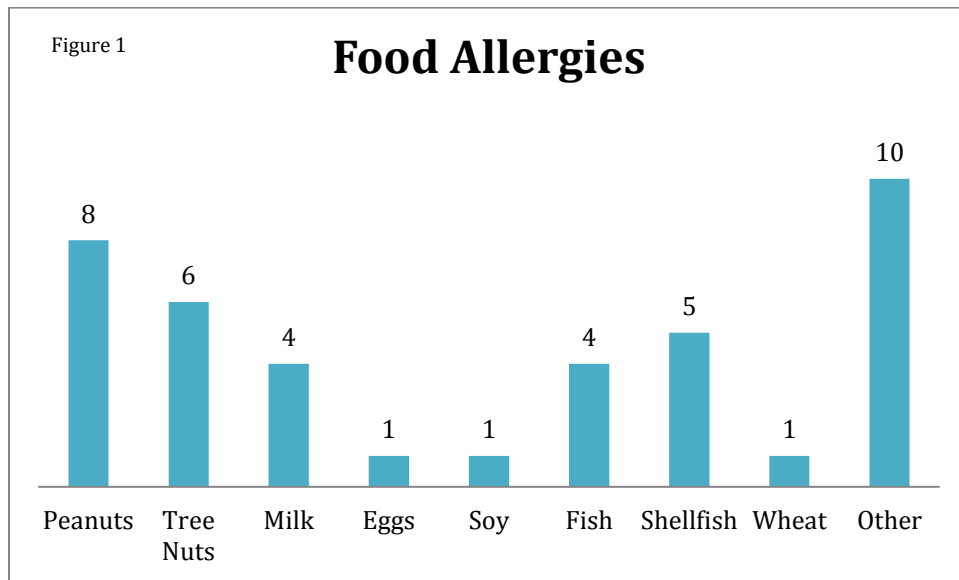
Another participant did indicate a life-threatening allergy but did not answer the survey questions with sufficient information to draw any conclusions about their experience abroad; however, this individual is included in the total 16 participants with life-threatening food allergies.

Of the 16 survey participants that indicated a life-threatening food allergy resulting in anaphylaxis, wide ranges of allergens were represented: eight peanut allergies, six tree nut allergies, five shellfish allergies, four milk allergies, four fish allergies, one soy allergy, one egg allergy, and one wheat allergy. In addition to the eight



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major food allergens, participants were allergic to coconuts, lentils, green beans, carmine (a natural red dye made from insects), pork, an unknown preservative, sulfites, monosodium glutamate (MSG), seaweed, tomatoes, and strawberries. See Figure 1. Many of the participants indicated having multiple food allergies; therefore, there are more types of food allergies represented than number of participants.



Participants were asked to rate their allergies on a scale of one to ten, one being the least severe and ten being the most severe. Fourteen participants rated their allergy with a severity of eight, nine or ten; only two participants rated their allergy as a five or a six. Twelve participants (75%) reported having experienced anaphylaxis with only three participants (19%) saying they had not. One individual indicated he came close to anaphylaxis in his survey but after further questioning his symptoms indicated having experienced anaphylaxis, bringing the total of participants who have experienced

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anaphylaxis up to thirteen (81%). All of the sixteen participants reported having been prescribed an epinephrine auto-injector.

All of the respondents indicated that cross-contamination, the accidental contamination of a food that normally does not contain an allergen, affects them in some way; thirteen participants (81%) indicated that they try to avoid foods that may have been contaminated, half of the participants stated that they have had reactions resulting from cross-contamination. Respondents indicated mixed levels of discomfort eating food cooked by someone else. Nine (56%) respondents reported feeling comfortable eating food prepared by someone else depending on factors such as, having a relationship with the person cooking, having explained the allergy to the cook prior, being present while the meal was being made, and having asked questions about the prepared meal. Five (31%) respondents said they are not comfortable eating food prepared by someone else. The remaining two participants did not provide an indication.

As a way of coping with food allergies in daily life, participants reported carrying epinephrine auto-injectors and anti-histamines with them; however, two participants said they did not often carry an epinephrine auto-injector due to the inconvenience of its size and other factors that will be discussed later. One individual reported in her follow-up interview that she does not easily tolerate epinephrine due to a separate medical condition; another participant reported carrying steroids with her abroad in addition to antihistamines and epinephrine auto-injectors. Although it was not specifically asked, reading the ingredients of all food items, as well as cooking their own food was of high importance to eleven (69%) of the survey respondents. Had it been specifically asked, this number would likely be higher because allergy avoidance, therefore reading

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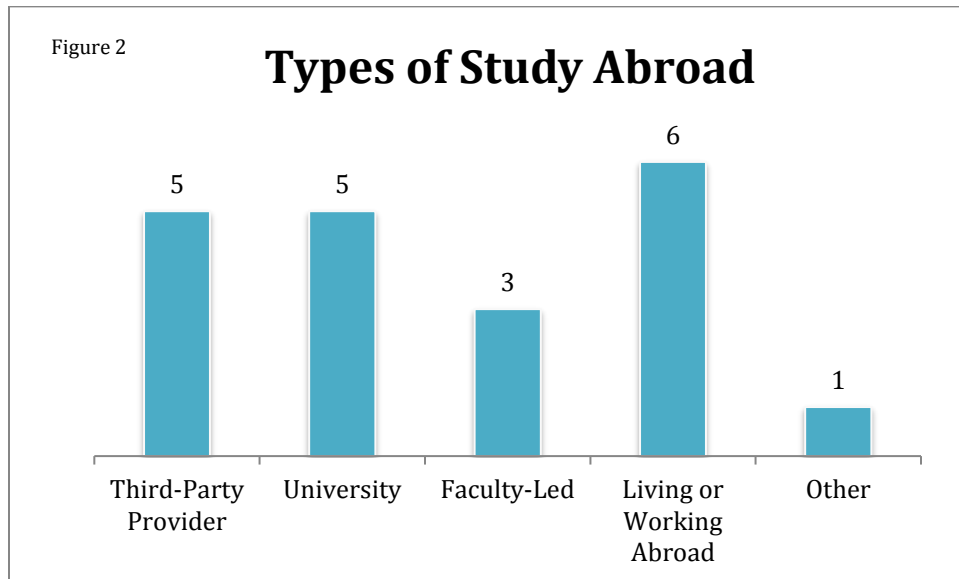
ingredient labels, is key to survival. Respondents also said being proactive and making sure those around knew about the food allergy helps them manage their allergies. Two participants reported wearing a medical alert necklace or bracelet to alert first responders and two others said they often carry around small snacks in case they are not able to find safe foods for a period of time.

A wide variety of study abroad locations are represented in this survey as well. Participants indicated having studied, traveled, or worked abroad in the United States, France, Italy, Spain, Germany, Japan, Mexico, Morocco, Panama, New Zealand, Croatia, South Africa, Botswana, Malawi, Namibia, Nepal, Swaziland, Zambia, Zimbabwe, India, Thailand, Korea, Qatar, Indonesia, Netherlands, the United Kingdom, Switzerland, and the Democratic Republic of Congo. The participants listed a love of travel, exploring cultures, learning new languages, and enhancing their education as a reason for studying abroad.

Over time, respondents have participated in multiple study abroad experiences; therefore, there are more types of study abroad represented than number of participants. Nine of the participants (56%) decided to go abroad again to live and work. Thirteen (81%) of the survey respondents participated in traditional study abroad programs through their school or a program provider. Of those who chose a traditional study abroad program, five went through a third-party program provider, and five went directly through their university. The duration averaged about four months, a full semester, abroad. Three participated on a faculty-led program varying from a full summer to only several weeks abroad. Six had traveled independently for personal growth or lived and worked abroad. Three of those who had decided to live and work abroad developed their

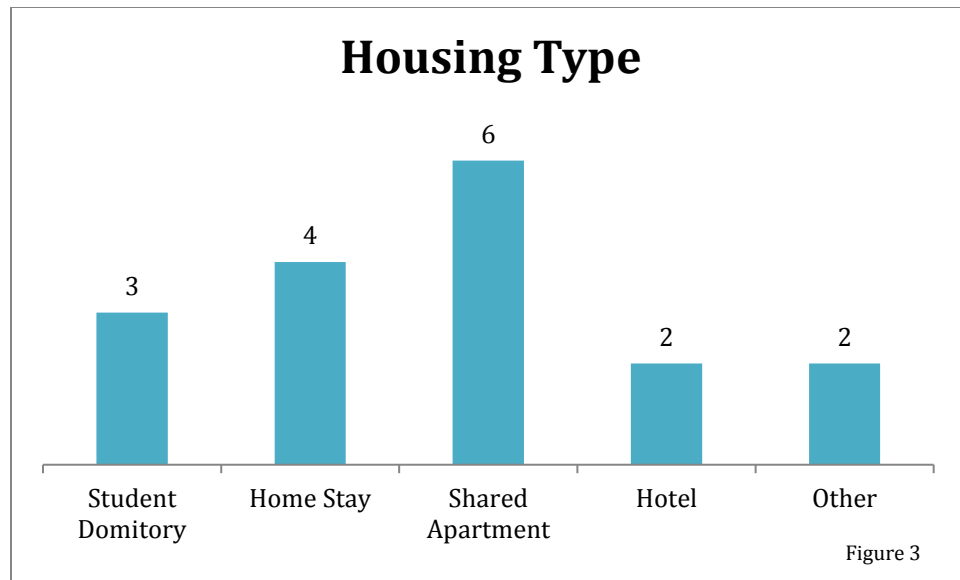
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allergies either during or after their study abroad experience so their responses reflect the issues they face managing their food allergies while living and working abroad. See Figure 2.



A variety of living accommodations were represented as well over multiple studies abroad. Six participants lived in shared apartments with other students, four reported living in a home stay, three lived in dormitories, two stayed in hotels, and two reported living on a farm share, camping, and living in hostels. See figure 3.

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Of those who had host families, they had mixed responses about how well their host family understood their allergy. It seems that all of the four host families attempted to be understanding and accommodating, but there were still misunderstandings. Two participants had good experiences and reported that their allergens are not common ingredients in the host culture, while two other participants reported difficulties living with a host family. One particular individual said she decided to live with a French family that had known when she was younger. She was surprised about their lack of empathy towards her food allergy, as they believed she should have outgrown the allergy by adulthood. She was allowed to cook her own food in their house, but the host mother kept insisting, “a little bit won’t hurt” and insinuated she was pretending to have an allergy to stay thin. Twelve (75%) of the participants did not feel that a host family was the right choice for them because it meant not being able to have control over cooking their own food. One participant, however, stated that she appreciated her host family because it

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would have been more challenging to cook for herself due to unfamiliarity with the local food.

Likewise, those who lived in dormitories and shared apartments had mixed responses regarding how well their roommates understood the severity of their allergies. In the survey responses, all participants who had roommates indicated their roommates understood the allergy; however, in follow-up interviews, two respondents reported having a few issues. One individual who was studying abroad in Germany lived in a shared apartment with seven other students and had issues with cross-contamination in her apartment. The individuals she was living with kept using the same sponge, contaminated with her allergen, to clean not only their plates but hers as well. This led to a confrontation but was eventually solved by agreeing to keep a separate sponge for her to use in a plastic container. Another individual who was working in South Africa had a similar situation with cross-contamination in her kitchen when her roommates left fish oil on the countertop that she touched. This, unfortunately, led to an emergency room visit. Other participants had an easier time with their accommodations and were able to live with roommates who were compassionate and understanding about their food allergies. One individual was able to live with her best friend while abroad so the risk of cross-contamination in the apartment was minimized. Of those six who chose to live in an apartment, many reported feeling happy with their choice; however, there were challenges with roommates and the financial burden of buying cooking equipment for a short-term stay.

Thirteen participants (81%) had done some preparation in regards to their food allergies prior to studying abroad. These preparations included researching local cuisine,

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and healthcare facilities. Many reported speaking with their doctors ahead of time to get prescriptions for antihistamines and epinephrine injectors so that they could have enough to last the duration of the trip. In addition to research, two participants communicated their needs to their universities and study abroad providers to ensure their living situation would be safe. This involved either having conversations with a host family prior to arrival or ensuring that they would have access to a kitchen while abroad. Two participants also asked for special written permission from their doctors to carry the epinephrine auto-injectors on the airplane as well as take the required medicine through customs upon arrival. Five participants made translation cards that explained their food allergy and ingredients to avoid in the local language. One participant carried stickers with a picture of shrimp and a slash through it to indicate the food allergy. Another participant made sure to bring a medical alert bracelet with her to alert medical professionals. A third individual said they packed their own food in a suitcase. Three (19%) of the participants said they did no preparations prior to studying abroad. However, one interviewee pointed out that life with food allergies always requires preparation before doing anything, so while she said she reported no preparation in the survey, she meant that she did no more preparation than usual. Of those who had done some form of preparation prior to studying abroad, they reported that it did help them during their stay.

When asked what difficulties participants encountered before studying abroad, responses were varied, likely due to the vagueness of this question. Participants talked about the general challenges of living with a food allergy such as finding safe foods, navigating social interactions that involve food, feelings of anxiety (including the various

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reactions they may have had prior to studying abroad), and carrying the required medicine. Two participants discussed the issues they faced in their home universities in the dining hall. Two other participants stated that whether one is in their home country or abroad, it is a constant struggle and the challenges are the same. One participant pointed out that her allergen, dairy, is hard to avoid in her region of the United States. Another individual pointed out that they would have liked to join Peace Corps, but Peace Corps did not accept individuals with life-threatening food allergies.

Half of the participants reported their food allergies influenced their decision to study abroad with four individuals choosing their location based on factors such as, proximity to medical facilities, local language, and local cuisine. They emphasized the importance of researching these topics ahead of time. One individual felt more comfortable studying abroad in an English-speaking country, while another individual made it a priority to learn the words necessary in the local language to communicate their food allergy. Two participants mentioned the importance of stocking up on medication before studying abroad. Three of the participants who were allergic to peanuts or tree nuts expressed a desire to avoid Asia due to the perception of a nut and peanut based diet, while one decided to study in Japan because peanuts were not perceived as common in the diet. One of the individuals with a nut allergy reported that her doctor advised against traveling to Mongolia for work due to the perception that Asian diets use nuts.

Of those whose food allergy did not impact their decision to study abroad, one individual reported traveling abroad previously and successfully managing her food allergies. Having prior travel experience seemed to increase her confidence in her ability to manage her allergies abroad. Another individual stated that they specifically avoided

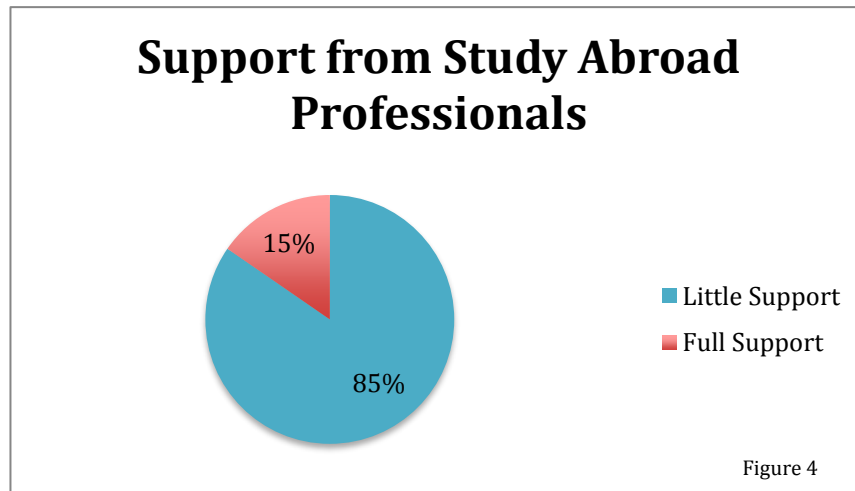


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participating on a short-term faculty-led program because they knew the meals would be planned ahead of time and they would not have access to a kitchen.

Seven respondents (44%) reported not receiving extra support from their families specific to study abroad, aside from the general support that a family provides. Four respondents (25%) said that their families helped with the added cost of medicine, while one participant reported that a family member helped her practice food allergy-specific vocabulary in the local language. Two participants expressed that their families were overly concerned about their decision to study abroad, which was frustrating to the participants. A different respondent mentioned in her interview that while her family didn't discourage her travel, they do worry about her while she's abroad and it takes a toll.

Of the thirteen respondents who participated in a traditional study abroad program, eleven respondents (85%) indicated that they had little support from study abroad or university professionals; although, specific requests such as housing, skipping events involving food, and relaying allergy information to restaurants and host families were typically met. See Figure 4. One individual expressed that she wished her school had provided more resources and had discussed with her how her allergy could be managed abroad.



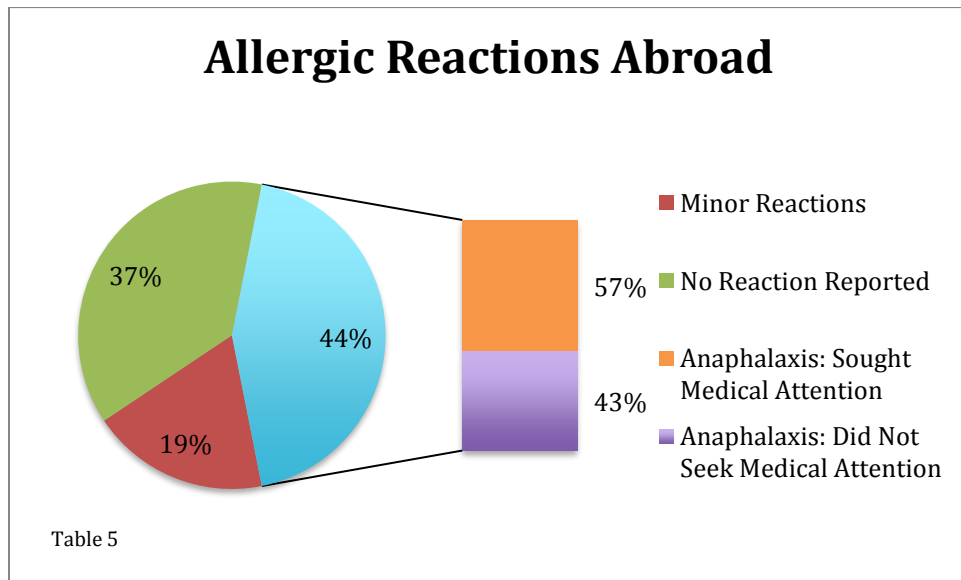
Although it was not specifically asked, two participants reported not seeking help or support from study abroad professionals and two other participants did mention that they reported their allergy concerns to their study abroad professionals. It is interesting to consider what the responses would have been if a survey question was included to ask if participants had informed their study abroad professionals of their food allergies. One individual reported that study abroad professionals often came to her seeking advice not only on how to manage her allergies but how to manage the allergies of other students as well. Two individuals reported having positive experiences with the onsite study abroad professionals. The onsite study abroad professionals helped the individuals identify what meals they could safely have and helped with translations regarding the allergy. One participant, however, did not feel that the study abroad professionals took her allergy seriously as they did not help her find safe food to eat on a staff lead excursion in Morocco.

Support was often received from outside sources, or not expected, as in the case of adults living and traveling abroad for work. One individual found support in FARE,

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then called Food Allergy Anaphylaxis Network (FAAN), while others reported their medical professionals providing support and resources prior to studying abroad.

Fifteen (94%) participants reported encountering challenges regarding their allergies while abroad. Some of these challenges included making sure the locals understood the severity of the allergy, having to limit their food choices, being able to fit enough food in a suitcase, and offending locals by refusing food. Seven individuals (44%) reported having gone into anaphylaxis while abroad and three individuals (19%) reported having had minor reactions abroad. Of those who reported having anaphylactic reactions abroad, only four individuals (57%) sought out medical attention. See Figure 5. One individual was hospitalized twice in South Africa and twice in Nepal; another individual was treated in the emergency room in Spain, the remaining individuals did not disclose where they experienced anaphylaxis.



When asked if the participants would have done anything differently regarding their allergies while abroad, responses were varied. Seven participants (44%) responded that

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they would not have done anything differently; nine participants (56%) said they would have asked for more support from study abroad professionals, would have done more preparation prior to departure, and would have packed a few more food items to bring with them. One individual wished they hadn't been so afraid to visit a foreign hospital when they had a reaction and another individual shared regrets that their fellow students and accompanying faculty member were not understanding about their allergy, even complaining that it made things difficult for the group.

Fifteen respondents (94%) felt some pride in their ability to manage their food allergies abroad despite the heightened risk. This was expressed in various ways; many participants took satisfaction in simply not having had a reaction, while others felt empowered by taking control of their allergies while in an unfamiliar environment. One individual now acts as an advocate in the field for students who want to study abroad with food allergies, while another individual is writing a book with characters who have food allergies in hopes to publish one day.

When asked about positive and negative surprises while abroad, participants had varied responses. Four participants (25%) reported negative experiences in trying to help the locals understand, from host families to friends, and in some cases doctors. One individual experienced anaphylaxis in Nepal and her doctors didn't treat her according to her medical history. They gave her medicine she was also allergic to, which only worsened the reaction. The high cost of an EpiPen was a surprise to one individual who studied abroad in the United States. Two individuals had positive surprises. One felt that food labeling laws were better in the United Kingdom than in the United States, another said that allergy-friendly food was more accessible in France than in the United States

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and a third participant was thrilled that her host family had a garden where they grew most of their food. Four individuals mentioned that their experiences were neither positive nor negative; one participant suggested that even the most horrific of events could lead to a positive outcome. Another individual reported feelings of regret that she was not able to try new foods while abroad.

The participants were asked to compare their host countries attitudes towards food allergies to the attitudes of their own country. These responses varied greatly which correlates with the wide variety of locations. The main sentiment expressed was that labeling laws are similar between Europe and the United States, but there was a general lack of food allergy awareness in Europe. Those who studied abroad in Asia said that there is little food allergy awareness, and food-labeling laws are not strong. The individual who spent time in South Africa mentioned that food, in general, is scarce in some South African communities so advanced planning was essential for her to find allergen-free food but food allergy labeling has improved over the past few years. Two participants felt that their host countries, France and the United Kingdom, had a better general attitude towards food allergies than the United States.

The participants were asked to give advice to someone with food allergies who wanted to study abroad. The general tone of their advice stressed the importance of taking responsibility for the food allergy, being proactive and making others aware of healthcare needs. They recommended talking with doctors to create a treatment plan, researching the local food culture, investigating the healthcare facilities and learning local vocabulary to explain the food allergy ahead of time. There was still a split between those who thought homestays were too dangerous for individuals with food allergies, and those

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who thought a homestay was possible. Three of the respondents' advice was to live alone to ensure access to an allergy-free kitchen with one individual advising prospective study abroad students to, "Live alone. Definitely don't live with host parents because the older generation especially don't understand food allergies." Half of the participants had a positive experience reflecting upon their time studying abroad and expressed feelings of pride for having managed their allergies abroad successfully.

A few topics that came up in the follow-up interviews were not addressed in the survey. One participant, who is originally from Mexico and is allergic to pork and carmine, said that while she was living in her own country she never considered her pork allergy to be more than a mild allergy. After she moved to the United States in pursuit of a PhD, she had an anaphylactic reaction to carmine; she then started taking her allergies more seriously. She claimed this is largely due to the culture in the United States where people openly talk about food allergies. She has since moved to Germany with her husband and has had a different experience there. The local German cuisine uses a lot of pork, so it is a difficult food item to avoid. She also has a hard time explaining her food allergy to the locals, as neither pork nor carmine are common allergens. She says the Germans have an easier time understanding the carmine allergy, after she explains that carmine comes from insects, than they do her pork allergy.

Another participant traveled to Asia on a personal educational trip. He is originally from the United States and similarly did not consider his allergy much until he went abroad. He said he took his allergy for granted while in the United States because of the strict labeling laws and he had few run-ins with peanuts while growing up. He said he tended not to disclose his peanut allergy because he did not want to make others

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uncomfortable or view him differently. He did, unfortunately, have an anaphylactic reaction to a dish with undeclared peanuts in Japan. As this was one of his first reactions as an adult, he did not immediately recognize it to be anaphylaxis but once he started having trouble breathing he knew he had eaten peanuts. He was living in a rural environment about 45 minutes outside of the nearest city and nearest medical facility. Instead of using his epinephrine auto-injector and going to the hospital, he said, “something clicked in my head and I realized if I don't vomit right now. I'm going to die.”

He managed to vomit his meal containing peanuts and after monitoring his health for several hours started to feel better. During that time, he wrote to all his loved ones because he was not sure if he would survive the reaction. In his recounting of the story, he stressed how much he hates inconveniencing others and how he prefers to avoid hospitals. He acknowledged that most people with food allergies would be upset that he did not use his epinephrine auto-injector, though, he stressed that he needed this life-threatening experience to learn from his mistakes and take his allergies more seriously. He also mentioned that he thinks he is developing an allergy to a preservative but has yet to identify which preservative.

One interesting point this individual made was that food allergies could be considered a “white person, first world, rich people problem.” This was further echoed by a participant from Mexico who wrote in her survey response, “...in countries with less resources, people consider the allergy a part of life, and don't fuss too much about it, they just avoid the food.” He further went on to explain that he has noticed that food allergies and general seasonal allergies may be a result of an immune system that is “bored,” or not being exposed to enough environmental threat so it attacks arbitrary flower pollen or

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food proteins instead. This is indeed a common theory among medical professionals who study food allergies.

Another individual who has traveled extensively and currently works in South Africa has experienced work discrimination both abroad and in the United States due to her food allergies and autoimmune disease. She mentioned that in her past two positions, her employer suggested that the field might be too demanding for her to manage with her health needs. This individual works in the field of study abroad and while she does not feel that her food allergies and autoimmune disease affect her ability to do her job, she occasionally does need to request time off to recover from an allergic reaction or see her health care provider back in the United States. She stressed that she would understand if she was asking for time off every month, but she does not have reactions that frequently, nor has she had reactions during critical times on program. When she requested time off to see her doctors in the United States, she was met with resistance due to the work schedule and her employer tried to persuade her to leave the job, even though she had sick leave according to her contract.

Another interview participant had lived in Switzerland during her teenage years, studied abroad in Paris and traveled around Europe, Asia, South America and Africa. She also worked in the Democratic Republic of Congo. She feels that having lived abroad prior to studying abroad helped her feel confident to manage her food allergies on her own. She often traveled with translation cards, extra epinephrine auto-injectors and on one occasion, brought a suitcase full of non-perishable food. She found that while traveling around Africa, the locals were struggling to understand her allergy; fortunately, she was able to come up with a way to explain it so that the locals could understand.



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One interview participant was working abroad in Qatar when he discovered his allergy to green beans. He was not able to rely on an epinephrine auto-injector for several reasons. First, it was illegal to carry an auto-injector in Qatar, as they are considered for medical professionals only. In addition to local laws, epinephrine auto-injectors are heat sensitive and he worried that the excessive heat in the Middle East would render the medication ineffective. He mentioned that air travel is quite nerve-racking for him and he always carries a doctor's note so that he can take his epinephrine auto-injector on the plane and through customs. He has never had an issue, but it continues to be a source of stress while traveling.

Three participants expressed issues with air travel and accessibility to safe foods during long flights. The individual who worked in Qatar pointed out that airline food never seems to have ingredient labels nor is there any way to add food allergies to a frequent flyer profile. An individual who studied in Germany and travels for work says that air travel for her is quite scary as tree nuts are a popular in-flight snack. As a precaution, she wipes down her seat and tray table with wet wipes but is unsure if this actually does anything to help. She also explains her food allergies to those sitting next to her on the flight, but this does not always prevent them from eating tree nuts and peanuts around her.

Five of the interview participants mentioned how difficult maintaining cultural appropriateness can be when it comes to social events involving food. In many cultures, it is considered rude to refuse food, but that is exactly what many with food allergies have to do. For example, one individual who was experiencing the onset of anaphylaxis at an

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Indian restaurant in the United Kingdom was asked to stay for tea so that the waiter could apologize.

Another topic that came up, although it was not specifically asked about, was assumptions about food culture. There was a common theme among the participants who had nut allergies that Italian food was generally safe. One individual reported being surprised that food in Italy contained more nuts than Italian-American food. Another individual reported that, as he had not seen peanuts for a long duration of time on his study abroad, he started to assume they were not in the diet, but then accidentally ate a meal with peanuts.

## DISCUSSION

While the initial research was intended to explore food allergies in traditional study abroad programs (through providers or universities), a significant portion of the responses were from individuals who have lived or worked abroad, as well as those who have traveled for personal development. Overall, the individuals who participated in the research believed that study abroad is an attainable goal for those with food allergies, but it does take a certain amount of preparation ahead of time.

Eleven of the thirteen (85%) respondents who participated in a traditional study abroad program expressed not having support, in regards to their food allergies, from study abroad professionals; although, several did not seek support from study abroad professionals. Upon reflection, many respondents who participated in a traditional study abroad said they would have appreciated some support from their university or study abroad professionals. In retrospect, it would have been important to include a question in the survey to inquire if those who studied abroad through a provider or university sought to inform their study abroad professionals about their food allergies. As indicated in the literature review by *Allergic Living* as well as my own blog, many students, while up-front with their friends and living partners, do not always ask for accommodations. Communication with study abroad professionals is essential, if a student does not request accommodations, accommodations can not be made.

The strong, yet differing, opinions towards living with a host family are interesting, as it highlights the various lived experiences of the participants. It seemed that even prior planning did not always equal to a positive experience with a host family, as there were

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too many variables. Ultimately, housing and sharing a kitchen is a challenge for those with food allergies whether abroad or at home and this is reflected in the research.

Many responses reflect the literature regarding travel abroad. As the research by Barnett, Boting, Gowland, and Lucas (2012) indicated, many of my own participants reported issues with air travel and accommodations, preferring to stay in locations based on familiarity with the language and perceived ideas of the local cuisine. My participants also used many of the same coping mechanisms, such as using translation cards, wearing medical alert jewelry, and packing extra food in their suitcases. A main difference between my findings and that of Barnett, Boting, Gowland, and Lucas (2012) is that theirs discusses vacation travel and my research discusses study abroad as well as living abroad. The length of time abroad is different so tactics like packing extra food do not work for a long-term study abroad. As many of my participants were students, laws like the ADA require colleges, universities, and third-party providers to provide a certain standard of accommodation. Individuals on short-term vacations do not have these same legal protections.

This is not a holistic study and the results only reflect the views of the 16 participants in this research. Further research is needed to investigate how to better support students with food allergies on study abroad programs. It would be interesting to have multiple studies based on study abroad locations, as countries have different laws and attitudes regarding food allergies. This research could be used to create a database with information on the local cuisine, access to medical facilities, local healthcare practices, cultural attitudes towards food allergies, etc. This database could be organized by country or region. It could then be used as a tool for students with food allergies, their

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families, and study abroad professionals to be able to determine the best location to accommodate for an individual food allergy. As it would be country based, this would take a significant amount of work and would likely take place over several years.

It would also be interesting to research the attitudes and food allergy awareness of study abroad professionals as well. This could be used later to create resources and training workshops geared towards study abroad professionals to help them understand the severity of food allergies and how to accommodate students with food allergies abroad. It would be useful for FARE and other food allergy support networks to include a set of guidelines for studying abroad with a food allergy, similar to that of GoAbroad's *Travel Tips*, and FARE's *College Initiative*.

As there is no cure, food allergies often become a life-long health issue that adds extra challenges to day-to-day activities. As more students with food allergies in higher education study abroad, colleges and universities need to be able to accommodate these students not only on campuses but also during study abroad programs. There are several organizations that provide assistance to students with food allergies in higher education, but they fall short at providing resources for those who want to study abroad. There is little information available on the topic, yet many of the participants expressed interest in further research of food allergies abroad.

**BIBLIOGRAPHY**

- Barnett, J., Boting, N., Gowland, M. H., & Lucas, J. S. (2012). The strategies that peanut and nut-allergic consumers employ to remain safe when travelling abroad [Scholarly project]. *Clinical and Translational Allergy*, 2012; 2:12. Retrieved January, 2016 from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3480958/>.
- Bennett, P. (2014, August 6). Off to college with allergies, celiac. *Allergic Living*. Retrieved from: <http://allergicliving.com/2014/08/06/off-to-college-with-allergies-celiac-u-s/1/>.
- Food Allergy Research and Education. (2008). *Food allergy facts and statistics for the US*. Retrieved January, 2016 from: <http://www.foodallergy.org/file/facts-stats.pdf>.
- Food Allergy Research and Education. (2015). *Pilot guidelines for managing food allergies in higher education*. Retrieved January, 2017 from: <http://www.foodallergy.org/file/college-pilot-guidelines.pdf>.
- GoAbroad. Kraska, Nikki. List, Madeline. Webster, Davis. (2016). *Meaningful travel tips and tales: health and chronic illness abroad*. Retrieved April, 2017 from: <https://www.goabroad.com/downloads/meaningful-travel-tips-tales-for-chronic-illness-Goabroad.com.pdf>.
- Murray, J. A., Van Dyke, C., Plevak, M. F., Dierkhising, R. A., Zinsmeister, A. R., & Melton, L. J. (2003). Trends in the identification and clinical features of celiac disease in a north american community, 1950-2001. *Clinical Gastroenterology and Hepatology*. 2003; 1:19-27

## Food Allergies Abroad

National Institute of Allergy and Infectious Diseases. (2011). *Guidelines for the diagnosis and management of food allergies in the united states; summary for patients, families, and caregivers*. (NIH Publication No. 11-7699). Retrieved November 2016 from:  
<https://www.niaid.nih.gov/sites/default/files/faguidelinespatient.pdf>.

Rattenborg, Emma. (2016). *Survival kit: studying abroad with a food allergy*. GoAbroad. Retrieved April, 2017 from:  
<https://www.goabroad.com/articles/study-abroad/survival-kit-studying-abroad-with-a-food-allergy>.

Roberge, Danielle. *Murvull & milk*. (2013). Food Allergies and Adventures. Retrieved March, 2017 from: <http://foodallergiesandadventures.blogspot.com.es>.

Trotch, Claudia. (2014). Food for thought: applying the ada to students with food allergies. *National Association of College and University Attorneys*. 12;7. Retrieved March, 2017 from:  
<http://www.higheredcompliance.org/resources/FoodAllergies.pdf>.

United States Department of Justice Civil Rights Division. (2012). *Settlement agreement between the united states of american and lesley university*. (DJ 202-36-231). Retrieved March, 2017 from: [https://www.ada.gov/lesley\\_university\\_sa.htm](https://www.ada.gov/lesley_university_sa.htm).

## APPENDICES

### Appendix A

#### Survey Questions

What are your food allergies?: Milk, Eggs, Wheat, Fish, Shellfish, Peanuts, Tree nuts, Soy, Other: \_\_\_\_\_ .

How severe are your food allergies on a scale of 1(not severe) to 10(extremely severe)?:

Have you ever experienced anaphylaxis?

Have you been prescribed an auto-injector?

To what degree do you strive to avoid your allergen? Please explain.

Are you familiar with cross contamination? How does cross contamination affect your individual food allergy?

How comfortable are you eating food prepared by other people? Please explain.

What coping tactics do you use to manage your allergy in everyday life?

Have you studied abroad? If so, where did you study abroad? If you studied abroad multiple times please list all locations.

How long did you study abroad? If you studied abroad multiple times please list the length for all locations.

What was the nature of your study abroad? Was it work or internship related? Was it lead by a faculty member of your university, a third-party provider or by a direct exchange?

What were your housing accommodations? Student housing, host family, shared apartment, etc.

If you had a host family or roommates, did you find them understanding and accommodating about your food allergy? Please explain.

Did you need to visit a medical facility due to your food allergy while abroad? If yes, please explain.



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Why did you decide to study abroad?

What preparations, specific to your food allergy, did you take to get ready for your study abroad?

What support, specific to your food allergy, did you receive from your family before studying abroad?

What support, specific to your food allergy, did you receive from study abroad professionals at your home or host institution before studying abroad?

Did you encounter any difficulties related to your food allergy before studying abroad, if so what were they?

Did your food allergy influence any decisions while preparing for study abroad? If so, in what ways?

What support, specific to your food allergy, did you receive from your host family?

What support, specific to your food allergy, did you receive from study abroad professionals during your study abroad?

Did your preparations before study abroad help you navigate your allergy abroad? If so, how? If not, why?

Did you encounter any challenges related to your food allergy while studying abroad? If so, what were they?

What would you have done differently, specific to your food allergy, during your study abroad?

What actions are you proud of or feel positive about specific to your food allergy, during your study abroad?

Did you have any surprises, positive or negative, specific to your food allergy, during your study abroad? What were they?

Did your housing accommodations have any effect on food allergy management during your study abroad?

After your study abroad, do you have any reflections related to your food allergy?

How would you compare the food allergy policies in your host location with the policies in the U.S. (labeling, awareness, use of offending food)?

What advice would you give to students with food allergies who want to study abroad? What tips have been successful for you that you would recommend for others?

## Appendix B

### Follow-Up Interview Questions

#### Preparation prior to study abroad

- Did any organization provide the support you needed to make helpful decisions regarding your study abroad?
- Do you feel that the support system you relied on prior to study abroad provided you with what you needed to make helpful decisions regarding your study abroad?

#### Nature of study abroad

- Do you feel like the nature of your study abroad influenced your food allergy management in any way? Please elaborate.

#### Housing accommodations

- Did those living with you (friends, host family, roommates) understand your food allergy concerns? Please elaborate.

#### Miscellaneous

- Do you feel like you had all the information up-front to you in planning your study abroad? Please elaborate.
- How did you manage your diet and nutrition while abroad?

#### Specific experiences related to the individual

- If you had any medical emergencies while abroad, would you care to elaborate
- Did the locals understand about your food allergy concerns? Please elaborate.
- How was your overall health and quality of life while abroad? Did your food allergy affect this in any way?
- Is there anything you'd like to talk about before we finish this interview?

**Appendix C**

Informed Consent

Exploring the Experiences of Students with Food Allergies on Study Abroad Programs

Researcher: Danielle M. Roberge

Dear Participant,

My name is Danielle Roberge and I am a student with the SIT International Education Master's Program. I would like to invite you to participate in a study I am conducting for fulfillment of my MA in International Education. Your participation is voluntary. Please read the information below and ask questions about anything you do not understand before deciding whether to participate. If you decide to participate, you will be asked to click "I agree" below.

The purpose of this study is to have a better understanding of the issues students with food allergies face while on a study abroad program and to use this information to better inform study abroad professionals about these issues. Your participation will consist of a survey in which you will be asked questions about your experience managing your food allergy or allergies while studying abroad. In addition to the survey, participants may volunteer to be interviewed afterward. The survey would require approximately 20 minutes of your time and the voluntary interview would require approximately 30 minutes of your time. If you have already participated in this survey, please do not fill it out a second time.

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There are no foreseeable risks to participating in this study and no penalties should you choose not to participate; participation is voluntary. During the interview, if you volunteer, you have the right not to answer any questions or to discontinue participation at any time. Potential benefits to participation in this study include helping to spread awareness for food allergies

Any identifiable information obtained in connection with this study will remain confidential. I will use aliases as needed and when the results of the research are published or discussed in conferences, no identifiable information will be used. Your participation is voluntary. Your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study.

Please type a response after the statement below. A “YES” response indicates that you understand the statement and are at least 18 years of age and you agree to participate. If you respond “NO,” your response to this study will not be used.

I understand the potential risks associated with participation in this study. I also realize that while the researcher will keep responses confidential, e-mail surveys are not secure. Furthermore, I am at least 18 years of age or older. YES/NO.

If the subject responds “NO” to this statement, any data received from the subject may not be included in the study.

If you have any questions or want to get more information about this study, please contact me at [Danielle.Roberge@mail.sit.edu](mailto:Danielle.Roberge@mail.sit.edu) or contact my advisor at [David.Shallenberger@sit.edu](mailto:David.Shallenberger@sit.edu).

## Food Allergies Abroad

In an endeavor to uphold the ethical standards of all SIT proposals, this study has been reviewed and approved by an SIT Study Abroad Local Review Board or SIT Institutional Review Board. If you have questions, concerns, or complaints about your rights as a research participant or the research in general and are unable to contact the researcher please contact the Institutional Review Board at: School for International Training Institutional Review Board, 1 Kipling Road, P.O. Box 676 Brattleboro, VT 05302-0676 USA.

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