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Notes from the Field

To Beef or Not to Beef: Defining Food Security and Insecurity in Tucumán Argentina

Ariela Zycherman¹

Anthropologists have had a long and rich history of drawing out the cultural importance of diet and the beliefs and rituals that are associated with it. Many anthropologists combine this knowledge with biological data to create a more comprehensive understanding of the diet. This skill becomes particularly important in understanding the difficulties of defining terms like food security and food insecurity among vulnerable populations. Popular working definitions focus primarily on the diet as being a nutritious entity that leads to a healthy and active lifestyle. While these definitions weigh heavily on the biological importance of diet, they deal with the issue of culturally relevant foods by using the term 'food preference', not considering the possibility that preferential foods and the way they are eaten can be in direct opposition to a nutritious and healthy life style. In the case of Tucumán, Argentina the preference for a beef-centric diet is associated, by government institutions, with malnutrition and a host of other health related problems throughout the province. However, local cultural definitions in Tucumán define food security as having beef as a daily component of the diet. Associated with this definition are various beliefs surrounding health, national identity, and family. Within these definitions Households and individuals are willing to go to great lengths, despite economic and health hardships to insure the daily presence of beef in their everyday lives. The result of these divergent definitions is that one interpretation of food security is understood by another to be food insecurity. This paper is a work in progress and explores how local definitions of food security and food insecurity play a role in daily diet maintenance and how these local definitions may conflict with the broader institutional and nutritionally based definitions.

Keywords: Argentina, Tucumán, Beef, Food Security, Food Insecurity

Introduction

After the 2001 collapse of the Argentine economy when food prices, particularly beef, rose dramatically, 21 deaths were reported in the province of Tucumán and were attributed to malnutrition and a lack of protein. Local definitions of food security and extreme adherence to the traditional beef diet demonstrate the importance of single food items in characterizing a healthy and active lifestyle relative to Tucumán. While the economic collapse and the rise of food prices certainly played a crucial role in the subsequent deaths and high malnutrition cases, the pre-existing health issues and strong cultural associations related to the diet might also have played a role in the existing vulnerability to food insecurity in the region. The importance of understanding local definitions of food security and insecurity and the role they play in diet maintenance is particularly acute among vulnerable populations, like Tucumán, where they remain in continual risk of hunger and malnutrition. This working paper explores how local definitions of food security and food insecurity play a role in daily diet maintenance and how these local definitions may conflict with the broader institutional and nutritionally based definitions. Additionally, it begins to connect Tucumán's vulnerability of the past, the present and the future by understanding further what cultural constructions surround the diet and effect its continuous maintenance.

Anthropologists have had a long and rich history of drawing out the cultural importance of diet and the beliefs and rituals that are associated with it. Many anthropologists combine this knowledge with biological data to create a more comprehensive understanding of the diet. This skill becomes particularly important in understanding the difficulties of defining terms like food security and food insecurity. The

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work of anthropologists can also be used to inform new cultural relative and culturally sensitive hunger and malnutrition policies to reduce vulnerability and insecurity. Popular working definitions like that of the Food and Agricultural Organization of the United Nations FAO), focus primarily on the diet as being a nutritious entity that leads to a healthy and active lifestyle. They define food security as "when all people, at all times, have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life." While this definition weighs heavily on the biological importance of diet, the FAO addresses the issue of culturally relevant foods by using the term 'food preference', not considering the possibility that preferential foods and the way they are eaten can be in direct opposition to a nutritious and healthy life style. In 2001, and in the following four years after the Argentine economic collapse, Tucumán received worldwide attention for serious food insecurity issues. In addition to severe economic issues, a preference for a beef-centric diet is also responsible for malnutrition and a host of other health related problems throughout the province. Associated with this diet are various beliefs surrounding health, national identity, and family. These assessments of what an ideal diet should be and why it should be that way conflict with the biological and nutritional components of food security as defined by the FAO. The result of these divergent definitions is that one interpretation of food security is understood by another to be food insecurity.

The research for this project took place over a three month period, between May and August of 2006, as an exploratory and preliminary study for further research. In addition to extensive archival research, I spent a significant amount of time conducting observations and participant observations through attendance at meals, afternoon mate drinking sessions, parties, asados (Argentine barbeques), volunteering in a local not-for profit, and grocery shopping. I conducted diet and consumption related interviews with 32 households. My informants came from three typical areas of the province of Tucumán; the urban capital city of San Miguel, the peri-rural industrial food producing village of Pacara, and a rural small farming town in the North called San Isidro. The three sites were chosen to give a comprehensive view of the types of households that exist in the region and the diversity that might exist in the availability of food and the maintenance of the diet. Within each area I gathered a random sample of approximately 10 households per site. (The urban section received a few more to account for the various socio-economic sectors of the city). I interviewed the person charged with shopping, gathering and cooking the food for each family. Generally that person was the eldest woman in the house. Occasionally the patriarch of the family in charge of the shopping or in the cultivation of a food product, or the daughters who participate in the shopping and cooking, participated in the discussion. Interviews included a recall of shopping items for the last month and description of meals for the week prior to the interview.

Because of the limitations of the research, this paper will focus on the local definitions of food security and insecurity in Tucumán. But will not discuss at length the complex economic system that influences Tucumán's vulnerability. This project takes place in the non-immediate aftermath of disaster and in the rebuilding process where attention is being paid to issues previously ignored by larger institutions like chronic malnutrition and morbid obesity. However, because the choices of my informants are not within a disaster framework, this research investigate how households appropriate the diet within the context of their own individual situations in less turbulent times. Further research will draw upon these preliminary results in a larger study looking at the context for health and economic vulnerability and the agricultural history that influences local definitions of food security and insecurity. And will explore how these results might be used collaboratively with nutritional assessments of food security to create appropriate bio-cultural remedies to issues of food insecurity and in the creation of preventative measures for the future.

Development of the Beef Centric Diet

In the 16th century the Spanish brought cattle to the new world with their early settlers. The cows that escaped easily adapted to life in Argentina's heartland, known as the pampas, where they successfully found a hospitable place to graze and reproduce on the flat grasslands. The cows reproduced quickly and

the pampas became characterized by the wild cattle that were multiplying in large numbers. Eventually there became interest in herding these non-native animals, and the profession of 'gaucho' was created. The gauchos moved the cattle across the plains and delivered them for slaughter, helping to initialize the first phase of the creation of the beef-centric culture of Argentina (Cara 2003). Subsequently, the gaucho, an individual who is totally immersed in a world of beef production and consumption became the symbol of Argentine national identity. The abundance of meat symbolized national security and a successful colonial experience. To be Argentine meant feeling secure that there would always be beef available to eat. This relationship between beef and identity has persisted, and remains in effect in Argentina today; an inseparable relationship between politics, people and diet. Centuries after colonization, Argentina has stayed true to its beef eating identity. After recently surpassing its neighbor Uruguay as having the highest beef consumption rate per capita in the world, Argentines now consume 68Kgs of beef annually per capita (Matos and Brandoni 2002).

Argentine politics have been tightly intertwined with the country's agricultural sector. It is considered a significant source of national pride that Argentina can feed its own population with domestic food stocks. Illustrating this point, in the last year, current President Nestór Kirchner stopped all exports on beef for 180 days to reduce prices domestically. According to the respected Argentine newspaper *La Nacion*, the government claimed that beef producers could not export if it was at the cost of hunger in the nation (Varis 2006). However, within a few months Kirchner began allowing a few particular exports but tacked on significant tariffs. This follows in the tradition of President Juan Peron who, in the 1940's, also supported the ideology that a dependency on exports of staple food products, (i.e. agricultural products including wheat and beef), to foreign markets should be reduced. Peronist policies decreased imports of any goods that could be produced indigenously, and implemented high tariffs on exports (Cavallo and Mundlak 1982).

Food Insecurity and Hunger in Tucumán

In 2001, the Argentinean economy collapsed, due to a "hard peg of the local economy to the US dollar and excessive borrowing" (Cruces and Wodon 2003:1). In the following six months the Argentine currency lost 70% percent of its value, and the country's Gross Domestic Product was reduced by 11%. (Cruces and Wodon 2003). Additionally, all of Argentina's production and utilities were privatized in the preceding years, leaving the state no income cushion to fall back upon. To counteract rampant inflation, the government was forced to increase taxes and reduce national social programming. According to the World Bank the dramatic rise in the poverty rate was in great part due to the price of foodstuffs, which comprise a large portion of the expenditures of the poor (Cruces and Wodon 2003). Food exports were an important source of ready cash in a recently cashless economy, with foreign customers able to pay more than local customers. Therefore, food prices rose drastically with the devaluation.

In December 2002, in Argentina, the Provincial Health System estimated that some 12,000 children were suffering from varying levels of malnutrition. A total of 62,000 families were being affected by hunger and malnutrition in the Tucumán province alone (United Nations 2002). According to *La Gaceta*, the Tucumán newspaper, 21 people died of malnutrition in Tucumán during the aftermath of the economic collapse of the country. Most of the victims were very young children. All were members of poverty stricken families who live below the poverty line or the indigent line (La Gaceta 12/2/2003, 5/6/2003, 2002). These are not objectively high numbers of death by hunger in comparison to other countries suffering from drought and famine, but coupled with a low birthrate attributed to malnutrition within a country famous for its food and once nicknamed the "bread basket to the world", hunger seems an improbable reality in Argentina. It should be noted that Tucumán is one of the poorest regions in Argentina. Tucumán, once a wealthy agricultural province, supported by sugar cane production, has been steadily suffering from continuous economic setbacks. In the 1960's Tucumán's large sugar industry began to decline. Poor political and economic policies followed in the 1970's restricting certain types of profitable agricultural production. And in the 1990's president Menem poorly privatized utilities like

trains and post separated them from the rest of the country and the quality of life declined tremendously. At the beginning of 2003, 56.4% of households and 67.2% of individuals in Tucumán were still living below the poverty line, and 28.3% of households and 37.4% of individuals there were living below the indigent poverty line in the greater San Miguel de Tucumán/Tafi de Valle region. (INDEC, 2003)².

Today Argentina has finished paying back its loans to the IMF and the country's large cities have become financially stable. Tucumán is experiencing some economic growth, but dietary problems persist. Obesity, overweight and other cardiovascular diseases including high blood pressure, cholesterol problems, hypertertension, and diabetes are all major health issues throughout Argentina. They are the cause of over 35% of deaths in the Nation (Ministerio de Salud Publico Tucumán). Tucumán is no exception and according to the Tucumán Ministry of Health, one of the reasons that over 50% of the population is overweight and 20% suffer from obesity is because of cultural constructions which do not educate people about smarter healthier food choices. Rather people choose foods with high fat content and little nutritious value. (Ministerio de Salud Publico Tucumán 2007, La Gaceta 2006) A study documented in La Gaceta conducted by three local nutritionists, Francisco D'Onofrio a professor of nutrition at the Universidad Del Norte Santo Tomas del Aquinas, Josefina Corzo de Rodríguez the head of the Department of Nutrition at Siprosa in the ministry of Public Health, and Víctor Gallo the head of Nutrition services at the Hospital del Niño Jesús, explains that the Tucumán diet predominantly consists of wheat based products, red meat and fried meat. This diet lacks vegetables and fish and results in high rates of obesity throughout the country and specifically in Tucumán. However, the researchers explain, people are so attached to this diet in Tucumán that when money is tight instead of finding other proteins or vitamin rich foods, people continue to rely on breads, polentas, and pastas, as opposed to more nutrient rich vegetables, leading to serious malnutrition and vitamin deficiencies. The researchers attribute this diet to poor nutritional education and poor distribution of a variety of fruits and vegetables. People in the Tucumán region are so accustomed to the beef-centric diet that during the economic collapse in 2001, when the price of beef rose dramatically in comparison to incomes, people starved rather than substituted other foods for meat. Many were unable to afford important proteins like beef in their diets, and instead relied only on starches like potatoes and bread and sugar. In the post disaster period people continue to make similar choices including beef in their diets often at the expense of other nutrient rich foods in order to adhere to cultural constructions of the diet despite a regional epidemic of cardiovascular diseases and problems.

Tucumán Diet

The Northwest of Argentina has embraced the Argentine diet wholeheartedly, so much so, that it holds the title as one of top two beef consuming regions in the country (Matos and Brandani 2002). Data from this query demonstrates that the traditional Tucumán diet practiced today is a protein based diet consisting mainly of beef served lunch, the largest meal of the day. People eat a large lunch including beef six to seven times a week prepared in a variety of ways. Beef can be served in the form of a steak, ground up and served in smaller portions in empanadas or dumplings, pounded and breaded and fried in the form of *milanesa*, and scraps and leftovers can be made into a sauce to be mixed with pasta which is then stewed and called *guiso*. The numerous ways people include beef in their diet coincides with the exclusion of green vegetables. This can be ascribed to both personal taste and to a variety of access issues depending on where you live. 66.6% of Tucumános do not eat the necessary amount of fruits and vegetables and eat them less than five times per week. There is an absence of green leafy vegetables in the diet which can be attributed to the lack of variety available for consumption. Additionally, vegetables most popularly consumed are high in starch like potatoes and corn (La Gaceta 2007). However, while many studies associate protein rich diets with cardiovascular problems, research done by Alicia Navarro on the relationship between the Argentine diet and health does not. (Navarro 2003) Navarro's research

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² As of the first half of 2006 number have reduced and 36.8% of households or 47.9% of individuals live under the poverty line and 11.3% of families or 16.1% of individuals live under the indigent line (INDEC)

takes place in the wealthier city of Cordoba and similarly she describes the argentine diet as being high in animal fat and protein from red meat and low fiber and fish (Navarro 2004:873). Further research will compare Tucumán's beef quality and cooking methods to that of wealthier cities where there is no correlation between cardiovascular diseases and beef. In poorer Tucumán, it might be easier and more cost effective to buy the cheaper fattier meats. Additionally, if the amount of meat affordable is not sufficient for *asado* or other cooking traditions, individuals might turn to fattier cooking methods like frying more often to increase flavor and make use of cheaper meats like the milanesa cut.

Breakfast is not very diverse and usually consists of a cup of coffee and a pastry. This is the standard breakfast served throughout the region's restaurants and in its homes. Dinner is not something people consistently consider a meal, rather it is occasionally a time to feed children or people who come home from work very late and might be hungry. Dinner can also be considered a part of the social experience in the city, where families and friends eat in restaurants in the late evening, but this is not something done on a nightly basis. Outside of the city, many people rarely eat a night time meal and instead take part in smaller meals or snacks known as *meriendas*.

Understanding Food Security and Insecurity Locally

The beef centric diet is often cited by local health officials as a cause of poor nutrition consider Tucumán to be a place suffering from food insecurity because of the large number of adults and children suffering from mal-nutrition and cardiovascular diseases. Post economic collapse, the region of Tucumán received a lot of attention from the national and local government as well as international aid agencies like the World Bank to try to address problems of food insecurity. However, local understandings of what it means to be food secure or insecure are just the opposite. These differing beliefs demonstrate the difficulty in defining food security in one particular objective manner. People in Tucumán view the beef centric diet as a symbol of their identity as Argentine citizens, as active family members, and as a factor in a healthy successful lifestyle. Many of my informants were aware of, or were experiencing health problems, such as high blood pressure, heart disease and high cholesterol often attributed to beef centric diets. Additionally, many face economic hardship making it difficult for them to maintain the diet. However, the prospect of addressing these problems by eliminating beef from their diets left many of my informants feeling ostracized from their identity as Argentines and removed from their families. Many felt that removing meat from their diets was contradictory to the ways they understood health and satiation. Not eating beef was considered to be food insecure by the majority of people interviewed.

There are three main food securities and insecurities that people discussed when they spoke about their diet. The first idea is, to be healthy and full you must eat beef and if you do not eat meat you will not feel well and you will be hungry. The second is, to be Argentine you must eat beef and if you do not eat beef you are not Argentine. The third is, meals with beef facilitate and sustain close familial relationships therefore if there is no beef at the meal the relationships will not survive or be equal.

What makes the situation in Tucumán unique is the manner in which people understand their diet in relation to health. Nine of the 32 households interviewed told me that one or more people in their home suffered from some sort of cardiovascular disease. Many more told me that their friends, neighbors and extended families suffered from a host of problems from high cholesterol to high blood pressure. While many of my informants understand the risks of the diet, many subscribe to the idea that eating meat is a nutritious food that alone leads to good nutrition and wellness. This is not to say that including beef in your diet is not nutritious or healthy, rather it is a concern that the extreme adherence to it where other nutrients are ignored and passed over in favor of beef. Many of my informants admitted seeing health consequences of their unvaried diet and talked to me about the cases of malnutrition that plagued the country after the economic collapse. Others talked about more personal experiences, and discussed familial histories of cardiovascular diseases including high blood pressure, hypertension, and heart

disease. Despite the doctor's suggestions that these ailments are related to the meat-heavy diet many would rather risk the consequences of the diet than abandon or adjust it in some way.

On countless occasions people expressed to me how important eating meat was to their health and physical wellbeing. For example, one woman named Carmela told me "I sometimes eat vegetables but I don't feel well when I don't eat meat." In a casual conversation with another woman she told me "I love meat, nobody eats vegetables but they love food." This informant's comments insinuate that meat is a food and vegetables are not. The importance of beef is seen as a stand-alone food item which dominates the idea of a complete diet in Tucumán. One informant, Marta, told me, "I was on a diet for four days. I did not eat any meat and I was so hungry, I missed it a lot." Another woman associated hunger with a lack of meat in her diet and explained that when she does not eat meat she does not feel like she is eating. Many of my informants described hunger as the result of eating a meal without meat. I observed that when people, men in particular, did not include meat as part of their lunch for more than one day in a row, they complained that they were "hungry" or that the food "was not real".

During my research beef was used on numerous occasions as a signifier of national identity and its consumption was one of the main differences between being Argentine and being from anywhere else. For example one informant told me over a dinner conversation that on a visit to Missouri to visit her daughter who was an exchange student there, she tried unsuccessfully to make milanesa for her daughter's host family. She compared the countries based on the availability of beef and determined that it was impossible to be an Argentine in the United States. Another informant said "the most important thing to know about the culture of Argentina is the culture of meat. It is very important. There are certain types of meat. And there are certain animals that you can't eat. The animals are distinct, some have harder meat, softer meat, tastier meat etc... and some are much more expensive than others. People know how to choose their meat. In your country they don't have that." The third time I heard this distinction was the first time I told someone that I did not eat meat. Very early in my trip I had been invited to an asado and I told them that I did not eat meat. My informant Jose said, "Its ok, we are accustomed to eating meat and you aren't". This theme of being "accustomed to meat" came up often when people spoke about their diet. People would often say to me, "In Argentina we are accustomed to eating lots of meat, it's how we eat. In North America they don't eat that way." The son of a local rabbi told me, "People don't care about anything else. If they can eat meat cheaply they are happy." When my informants discuss beef, they are often discussing how beef represents them as Argentine people.

Beef also plays an important role in the family. The times when beef is present as part of the meal are also times when the family gathers together to eat. One informant explained to me, "Food and the beef bring the family together". One of the main times when this occurs is during siesta when businesses and workers generally return home for lunch and the family eats together. The family also comes together on Sundays at the *asado* (Argentine barbeque) to participate in cooking and eating select cuts of beef. The tradition revolves around the meat and the process of cooking it. Despite the workweek constraints, the time intensive *asado* remains an institution and still plays a major role in the continuation of the traditional beef diet. Though it has come to include much more, the term *asado* specifically refers to an assortment of beef prepared on a grill. The *asado* grill, also known as a *parilla*, is a pit, usually filled with charcoal, and covered with a heavy metal grate. Special cuts of beef unique to Argentinean butchering are prepared including chorizo, blood sausage, intestines, ribs and various types of steaks. The family dynamic and its relation to beef are reinforced as entire extended families and friends gather together at the weekend *asado* to eat and to share in each other's company.

Diet Maintenance

The manner in which people succeed or do not succeed in maintaining the ideal diet and the reasons for maintaining or not maintaining the diet reflect local beliefs of what beef is symbolic of. 56% of my informants are able to maintain the diet completely, and eat beef for lunch six to seven times a week. For

a variety of other reasons including health concerns, economic concerns, and personal taste, 44% are unable to maintain the diet entirely and create a balance between their cultural constructions of the diet and external issues which deter their ability to maintain it. Of my informants who claim they do not maintain the diet, only 35% state that they do not like beef, (taste or dishes), and therefore choose not to include beef in their diet. 21% of the informants who claim they do not maintain the diet attribute it to economic issues. And the remaining 44% site health problems that do not allow them to maintain the diet. All of the informants citing health or economic problems express a desire to consume beef more often. In total, 89% of my informants claimed that they would like to or are able to eat beef six to seven times a week.

Those who are able to maintain the diet do so in very a variety of ways. While the Argentine government plays a role in facilitating the availability and affordability of beef, actually maintaining the traditional diet in a household is complex and difficult. Households are forced to negotiate and make real choices as to how to secure beef as a staple food in their diet. These choices are evident by the places people buy their meat, the quality they buy, the freshness of the meat they buy, the preparation time involved in the dish they plan, the jobs they take, the relationships they maintain, and the other foods they do or do not buy. People's shopping, crop growing, and cooking actions reflect the importance they place in a meat based diet.

Maintaining the beef centric diet is difficult for 80% of the families I interviewed. Many need to plan ahead a month at a time to be able to afford to keep this diet or to have the time to keep this diet. Some of the urban mothers made sure to go to the least expensive or the best quality butcher shop no matter the distance while at the same time bought whatever vegetables were available that day from the closest vegetable cart. Others who could not afford fresh beef at all bought it in bulk frozen. One urban mother who did this told me she really hates the frozen meat but she feels that her children should be eating meat as often as possible and she can't afford the fresh meat from the local butcher and does not have the time to search for another cheaper butcher.

Many of the households in this study made it possible to serve beef almost daily by stretching the amount of beef they prepare in a dish and buy buying less expensive cuts. For example in the town of Pacara a popular dish for lunch was a *guiso*. The *guiso* is a beef sauce cooked with noodles in it. The dish requires ground beef, one of the cheapest forms available. It is mixed with equal part tomatoes and then the pasta bulks the dish up. This dish is considered to be a beef dish and makes it economically feasible for many to include beef in their diets. Another popular way of stretching the meat presence in a meal is by serving milanesa. Milanesa is a fried and breaded piece of beef. It can be served as a sandwich or on its own, often with a side of fried potatoes. The *Milanesa* is a very thin piece of beef and is also relatively inexpensive. Serving milanesa gives the appearance of a full plate of meat but requires much less. A third dish that stretches the beef are empanadas that are filled with ground beef mixed with other ingredients and are stuffed in dough. The beef is sauté's with numerous spices and diced vegetables. But often egg is used as filler to bulk up the turnover.

Those people, who do not maintain the diet, rarely abandon it completely. Of the 44% of households where one person or the whole family is suffering from health problems and they are unable to maintain the diet, most relate these problems to adherence to it for many years. The majority of these problems are high cholesterol and high blood pressure followed by obesity. All were told by their doctors that in order to regain their health they must eliminate red meat from their diet. Not one of these people has removed meat from their diet completely. My informants mostly replace beef with chicken in particular dishes, but each family accomplished that in frequency and amount differently. 90% still eat beef one to two times a week. Almost all of the people in this category express feelings that they are the ones who are doing something out of the ordinary and are not eating as they should be or would like to be eating. All of my informants who cite health problems as a reason they do not maintain the diet told me that they mostly

eliminated beef from their daily lives but on weekends they always attend an *asado*. My informants cannot fully take the advice of their doctors because, even though eating beef poses a health risk, eating it is important to their familial lives and social lives. One informant, Renee, who sited health as a reason she does not eat beef and has high blood pressure and cholesterol told me "I love meat so much, when we go to *asado*, sometimes I will eat some meat. I like chorizo." Those informants with health concerns acknowledged that their new diets were healthier, but all of them describe a lack of real food or a desire for meat.

Of the people that cited health as the reason why they could not maintain the beef centric diet, only 45% were able to change the diets of their entire families. Often the spouse of the person with the health concerns or the children of the parent with the health concern insist that beef is still served daily. This means that the family, usually the mother, is forced to prepare two meals, one healthier option for those who have health issues and the traditional beef meal for those who do not have health issues. The severity of this relationship between beef and familial relationships is illustrated in the case of my informant Adriana, a woman in her late 60s who suffers from high cholesterol and high blood pressure. Adriana and her husband have many health problems and have many dietary restrictions. They have had to eliminate beef and dairy from their diet and their doctor recommended they eat more vegetables. Additionally, because of his illnesses, Adriana's husband was forced to retire from his government job. The couple is living off his pension and some savings, but food is expensive for them and they now qualify to receive the pantry bag of groceries from the government once a month. Adding to her burden, Adriana's son, daughter, and grandchildren all eat lunch in her home. They insist on a beef lunch without vegetables. She tries to accommodate them, "because" she says, "that is the role of a mother". Despite the additional labor and expenditures for food, Adriana explains that making two lunches, one with red meat, and one without, has become standard for her.

Conclusion

This working paper examines how Tucumános prevent themselves from becoming food insecure according to their own definitions and begins to uncover how local definitions of food security may conflict with the broader institutional and nutritionally based definitions. Additionally it suggests that while these definitions might not directly cause hunger or malnutrition in this moment, they might contribute to the vulnerability of the region to these types of epidemics in times of disaster both in the past and in the future. This research only begins to address the complicated nature of food security and insecurity in Tucumán and further investigation is required to gain a better understanding of the situation. Tucumán serves as an example of how in disaster and post disaster situations, cultural constructions are not always disgarded in the wake of difficulties. Rather, individuals find ways to combine their ideal diet with the current situation as best they can. In post disaster Tucumán, those afflicted with economical concerns and health problems find ways to interact with the diet to make it possible to maintain it.

Despite the risks authorities in the region relate to the maintenance of the high protein diet, most of my informants were either achieving it, or desired to achieve it. Despite the increase in literature from the local authorities criminalizing the high consumption of protein and the low consumption of vegetables, eating beef almost daily continues to be considered locally as a symbol of good health, national identity, and the way to ensure close family ties. People in Tucumán culturally associate the daily consumption of beef as the equivalent of being food secure. When beef is not part of the daily routine feelings of insecurity related to nationality, family and health surface. While many of my informants know the physical health risks associated with maintaining the diet, if they are not directly suffering from illness and compelled by a doctor's orders to reduce their beef consumption, they aspire to eat beef daily. Those who are suffering from illness see themselves as abnormal and food insecure because they are not able to participate in the diet as they would like to. For this reason, many of these informants often make exceptions and try to eat beef in moderation, rather than removing it entirely from their diets, despite the doctor's recommendations.

Many definitions of food security used in development and in the assessment of hunger or vulnerable regions revolve around the nutritional and biological factors of the diet. However, food is an integral part of culture and not a distinct, removable component. Specific foods are representative of a population's history, established customs, and beliefs and are embedded in everyday lifestyles. These local dietary idiosyncrasies must be acknowledged when defining a comprehensive and relative notion of food security. Not all populations eat the same food and not all consume it in the same manner, therefore there is a need for further research that highlights these customs and can contribute to the creation of sustainable bio-cultural definitions of food security. These definitions are meant to eliminate hunger, reduce malnutrition and prevent it from occurring in the future. Understanding the cultural relationship with the local diet and how that might affect what and how people eat will contribute positively to the creation of culturally relevant policies. Further research requires a more in depth study of how these associations play into everyday diet maintenance in times of crisis and calm. If and in what ways the traditional diet in Tucumán might causes a host of health related issues. How a high consumption of beef can be incorporated into a more varied diet where other foods are culturally accepted and nutritiously helpful. As well as an inquiry into the socio-economic related methods of food preparation that might affect health outcomes.

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