The Use of Food and Diet to Manage and Control Type 2 Diabetes in South Trinidad: Intersections of Contemporary Medicine, Folk Medicine, and Every Day Experience

by

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ABSTRACT

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In this thesis, I examine how type 2 diabetes is managed and treated globally in a country defined as an “emerging economy”. In areas of new development, while contemporary medical treatments are more universally accepted, such as prescribed medication, folk medical treatments can still be more accessible to specific areas. Foods, and access, are important variables to take into consideration when discussing the treatment of type 2 diabetes, thus making it a focus of my argument. I argue that the conceptualization of diabetes in Southern Trinidad is influenced by folk beliefs of disease and the human body, and that conversely, the treatment measures provided to those who are diagnosed are reflective of North American ideas of prescription medication and treatment (such as diet and exercise). What this does is create a dissonance between what is “good” versus “bad” for the human body, with variables attached to identity at the centre of the conflict such as gender, culture, food, and memories.
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In loving memory of Aunty Heather

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“Diabetes is not a medical issue, but a social one.” This statement by Minister of Health Terrence Deylasingh during his opening remarks at the 25th Annual Diabetes Conference at the University of the West Indies, St. Augustine Campus, resonated, and stayed with me from the moment I heard it in a full auditorium on a hot July day in Port of Spain. As an aspiring anthropologist, I often had to defend, and overelaborate why my research, focused on diabetes, and medicine, was relevant in my Master of Arts program, and why I was not studying epidemiology, or pursuing a Master’s of Science. While there is no denying the biological, and medical need for understanding type 2 diabetes, treatment methods, and food consumption patterns, there is pushback, and confusion when it is looked at as a social phenomenon. I hope this thesis helps rationalize and dignify the role of social scientists and anthropologists in healthcare and related professions, as we generally have a taste for nuance and craving for a challenge.

Chapter 1: Introduction

Type 2 diabetes is one of the most common non-communicable diseases, and one of the most challenging to deal with in the twenty-first century (Lieberman, 2003, p. 346). Worldwide, 3.2 million deaths are attributable to diabetes and diabetes-related illnesses yearly, with three-quarters of these deaths among people ages 35 years or under (World Health Organization, 2010, p. 9). Currently, 171 million people worldwide have diabetes with the number projected to double by 2030 (World Health Organization and the International Diabetes Federation, 2004, p. 4). Urbanization, lifestyle changes and healthcare innovations mean that increasing rates of diabetes are becoming more apparent, specifically within populations of non-Europeans/Western and in areas of development (McMichael, 2001, p. 68). This increase in prevalence within developing countries is especially concerning as they contribute 3/4 of the total global burden of diabetes diagnoses (World Health Organization, 2002, p. 15).

In this thesis, I explore the experiences of 20 participants living in South Trinidad and Tobago who are diagnosed with type 2 diabetes. The use of folk medicine and contemporary medical treatments in tandem to address ailments is not uncommon, however, the role of food consumption within these two types of treatment/management methods is relatively unexplored
in the context of the culture of food in the Caribbean as is the acceptance of disease and disease treatment. This is where I position my thesis, to identify these gaps and complexities in understanding diabetes as both a medical and social phenomenon.

**Background and Aims**

This study explores the ways in which those diagnosed with diabetes in South Trinidad mobilize as “biological citizens”, and thus, through social transformation, reconcile past and present knowledges about food, diet, contemporary medicine, and folk-medicine to manage and control their illness.

This ethnographic research project sets out to answer the following questions:

1) What does diabetes treatment look like in South Trinidad?
2) How is food used as a means of diabetes treatment and management?
3) What does social transformation and mobilization look like in attempts to control and manage diabetes unique to South Trinidad?

I identify instances wherein those with diabetes draw on different knowledges (colonial, post-colonial, Indigenous, and traditional/folk) to create a treatment and dietary plan that works with their current geographical, economic, and political situation. I also draw on structuralist ideas of contrasting concepts of health and wellness to elaborate on power imbalances between participants (patients) and institutions (doctors, and other medical personnel), and the crafting of active and passive actors in diabetes treatment and management in Trinidad and Tobago.

Like many Caribbean countries, Trinidad and Tobago have been removed from the Organization for Economic Co-Operation and Development’s list of developing countries within the past 10 years (OECD, 2015). There is a unique opportunity here to explore demographics and
individual and collective experiences with healthcare and infrastructure, as it is perhaps the only time in history where within the average person’s lifetime, they would have experienced living in a country defined as developing and then developed\(^1\).

**Key Concept and Framework Development – Biological Citizenship**

Throughout this thesis, I will argue that those with Type 2 diabetes in South Trinidad mobilize as biological citizens. Biological citizenship refers to the “the injured biology of a population [that] become[s] the basis for social membership and for staking claims to citizenship” (Petryna, 2004, p. 261). The conception of this term comes from Adriana Petryna and her ethnographic research into the lives of those impacted by the 1986 Chernobyl nuclear reactor explosion in Pripyat, Ukraine. The idea and presented framework of biological citizenship suggests that there is a complex interaction between the human body and the politics, economics, and sociology of the environment that the body exists in. Therefore, instances of violence, or harm done onto the body create a unique relationship between biology, policy, economies, and other socio-factors. In this thesis, I look to elaborate on how “informal economies of health care and entitlement are re-made” (Petryna, 2004, p. 251) to address the suffering that those with Type 2 diabetes in South Trinidad endure, not only due to the biomedical nature of the illness, but the socio-political and historical factors that frame notions of health and healthcare.

\(^1\) This definition of “developed” and “developing” is taken from the outlined classifications from the *World Economic Situation and Prospects 2017* which lists Trinidad and Tobago as a developing economy, still classified as a high-income country (thus, “developing” to “developed”) (United Nations Department of Economic and Social Affairs, 2017, pp. 156, 159).
Organization of Chapters

Chapter Two is an overview of the field site and methodology. I discuss some of the challenges I experienced while conducting this study, as well as offer insight as to why I chose an explanatory framework to develop my interview and pile-sorting questions, and how it plays a role in developing a more well-rounded analysis of subject matter that encompasses both fields of medical and nutritional anthropology.

I begin my literature review in Chapter Three, where I provide an overview of Farmer’s definition of structural violence and Petryna’s definition and framework related to biological citizenship. Elaborating on themes related to power and unequal power dynamics, I introduce an Oppression Model and Empowerment Model of patient/doctor interaction (Thesen, 2005), that provides insight towards the inherent biases that inform a passive patient/active doctor dichotomy. I explore the contrasts of food and consumption, food and food memories, and localization, delocalization, and relocalization. Delocalization of food systems in South Trinidad endorses the reemergence of folk medicine and folk ideas about food, the body, and memories. The process by which delocalization and subsequently relocalization happens is tied to my application of the Oppression and Empowerment models discussed early on in the literature review, therefore, rounding out the section as an elaboration and explanation of various working parts, themes, and ideas within the realms of medical and nutritional anthropology.

Chapters Four and Five outline my research findings, dividing them by merit of application to medical and nutritional/cultural anthropology respectively. I explore themes of identity, resiliency, adaptation, and the contrasts that inform a diversity of type 2 diabetes management and treatment measures. Chapter Four looks at how conceptions of health and illness are formed through various social, biological, and medical factors within South Trinidad.
These factors are influenced by ideas of deservingness, charity, and poverty that are reflected in both historic and contemporary ideas about the bodies that are deserving of health and wellness, and those who are not. In this section, I also explore other factors, such as party politics and crime, and how they play into the construction of one’s identity within the community, and how this newfound identification, again, reiterates who is, or is not deserving of health, or healthcare.

Chapter Five looks critically at the everyday diets of those in South Trinidad, as well how food consumption is rationalized beyond that of something needed for every day survival and sustenance. Finally, I share my concluding thoughts and suggestions for further research in Chapter Six.
Chapter 2: Field Location and Methodology

From June to August 2016 I lived in the village of Thick, in Siparia, South Trinidad, the same area that my grandparents and their kids, including my mother, have been living for almost 60 years. Often, people would walk up to me and ask if I was “Annie’s daughter” due to what I know now to be a startling resemblance that I have to my mother when she was my age. It was mango season, and many of the trees that lined the streets were full of fruit, ready for the picking. Mornings began early for everyone in Thick, around 6:00 AM, to combat the usual 30-degree Celsius heat that would creep up around noon. It was now that most family matriarchs would start the cooking for the day, to avoid having to turn on the stove when the heat and humidity made it to their kitchens. Those who worked in the more populous city-centers of San Fernando would often carpool; others would volunteer to walk groups of children to the main road so they could catch a taxi to school. Most days, I woke to the gentle rattling of beer bottles being cleared out and picked up from the popular bar and convenience store we lived right next to, or the quick pops of the truck horn from the local “fish man” and “veggie man” doing their first rounds of the street. On weekends, I would be awoken to the bicycle bell and friendly shouts of the “doubles man” selling this sweet-spicy, hearty country-staple down the street made with chickpeas, fried bread (baara), tamarind sauce, and pepper to taste. On a typical weekday, once everyone was awake, the water pumps turned on, and the kids bathed and dressed in their uniforms for school, it was time for breakfast.

The first part of this chapter acts as a general overview of the twin islands Trinidad and Tobago, with regards to its geography, population, economy, and notes on its increasing instances of violent crime. I offer an ethnographic account of the field site, South Trinidad, and the more specific city and region corporations that make up what is known most popularly as “South.” I then discuss my methods, starting with an explanation of the explanatory framework that I used to develop my interview and pile-sorting questions. I present an overview of the development and implementation of the interviews, pile-sorting activity, and participant observation that I engaged in for the sake of this study. I finish this chapter with a discussion of the 25th Annual Diabetes Conference, held at the University of the West Indies. The conference, hosted and curated by the St. Augustine Campus, was a unique and enriching experience wherein
I could navigate through a space where government officials, medical experts, and those diagnosed and affected with diabetes congregated to discuss national issues in diabetes care and advocacy.

A Brief Colonial History of South Trinidad

Characterized by rich, healthy farm lands ready for tending, anthropologist Yelvington discusses how the geography of South Trinidad made it an attractive area for incoming slaves from South Asia to take up residency either willingly or by the economic elite that presided over their re-location. To this day, areas of South Trinidad are occupied by lineages starting with these South Asian slaves and settlers, thus, pre-empting an understanding of past, current, and changing dietary habits and hereditary illness (Yelvington, 1993, p. 4).

The first documented Trinidadians, or “Amerindians” as per the collective name given to Caribbean dwellers by Christopher Columbus, excelled at fishing, farming, and pottery, with many opting to live either on the island of Trinidad or in Venezuela depending on food yield. Over time, settlements began to form more inland, with established communities organized by those who spoke Arawakan or Cariban. The Arawak and Carib inhabited the island in 1498, when Columbus claimed Trinidad as a Spanish colony. It was not until 1592 that the Spanish set up a permanent settlement in Trinidad securing it as a new Caribbean colony. The colony was neglected by the empire due to their vested interest in finding gold and silver, none of which could be found in Trinidad. Compared to English-owned colonies such as Jamaica and Martinique known for their sugar and other crops ready for trade, Trinidad had no main exporting crop. At this point in history, Trinidad’s economic stagnation was reflective of an overburdened, weak Spanish empire, more concerned with other areas of South and Central America with larger land areas and more apparent cropping/trading opportunities. As such,
except for wealthy Spanish governors, newly settled Spaniards and Amerindians established their families and communities by growing plots of maize, cassava, provisions, and vegetables, traded in-land. The poor economic climate of the colony persisted, as it is documented as late as 1725 many still lived without access to cross-colony spoils such as shoes, or knives (Brereton, An Introduction to the History of Trinidad and Tobago, 1996, pp. 1-9). A growing Spaniard population introduced the first major dietary transition in the area, with the incorporation of wheat into every day diets versus cassava, a staple food (Williams, 1964, p. 8). Diseases, such as smallpox, malaria, and yellow fever (Williams, 1964, p. 9) became rampant throughout the area, with mass-deaths resulting in a noticeable population change. As such, Spanish colonialists worked to bring African slaves to the island, thus, adding to the diversity of the in-land population. In 1783 an effort was made by the Spanish empire to turn Trinidad into a more profitable slave colony by allowing Catholic foreigners from friendly nations to claim areas of land. Areas of land were granted based on the amount of slave labour they were bringing into the island, therefore, the more slaves, the more land. French planters, and those who resided in the French Antilles found the offer particularly enticing, with more settlers arriving from French communities and from France once “the reverberations of the French Revolution were felt” (Yelvington, 1993, p. 4). During this time, Trinidad cultivated sugar, cocoa and coffee much like the rest of the Caribbean. In 1797, Trinidad was captured by Britain and ceded in 1802. The sugar industry continued the flourish under a British rule, and thus, a plantation economy was established (Yelvington, 1993, pp. 4-5).
It is here we see what Brereton calls the “legacy of slavery”, specifically, how the slave system and plantation mode of production\(^2\) used incoming slaves from Africa and India to prioritize societal organization for years to come (Brereton, 1993, p. 33). The plantation mode of production is further evident given the specific geographic manipulation made when the British allowed for an influx of Indians to populate Southern parts of the island. In 1834 a “new” system of slavery was introduced, with over 144,000 laborers coming in from India, and then later, Calcutta and Madras. Under these “newer” conditions were the promises of medical care, housing, and free passage back to India. After arriving in Trinidad, conditions were adverse and, at first, the new Indian immigrants struggled to find success labouring the land and yielding crops (Yelvington, 1993, p. 7). Here we can see the first recorded instances of ethnic stratification, between slaves of African and Indian ancestry. The caste-system practiced in India was brought over to Trinidad, with many still organizing communities based on its principles. Islam and Hinduism could be practiced, versus African religious traditions that were forbidden by slave owners. The *1891 Census of Trinidad and Tobago* highlights an ethnic division evident in employment with “whites as plantation owners, Chinese and Portuguese in trading occupations, urban-based\(^3\) blacks and coloureds moving into the professions and skilled manual occupations and southern-based East Indians almost completely in agricultural pursuits” (Yelvington, 1993, p. 8). Given the geographic divide between the two largest ethnic groups (of

\(^2\) A plantation mode of production is characterized by a “surplus accumulated from plantation production that is only transformed into capital once it was sent back to the "mother-country". This is an anomaly in comparison to a capitalist mode of production if the definition of the system relies on an understanding that labor is paid in wages. The anomaly is not apparent in a capitalist system if wage labor is understood as “capital-positing labor”, in which case, slave labor is a verifiable input (Bakan, 1987, p. 81) (Linden, 2016, p. 31).

\(^3\) “Urban-based” in this instance by Yelvington indicates North Trinidad, wherein most urban development took place from the 1800’s up until present day 2010’s.
African ancestry and of Indian ancestry), and the competition between each of their hallmarked industries, negative stereotypes of the two groups informed how each of the groups were viewed:

“Blacks were regarded...by East Indians as being lazy and irresponsible, as having a penchant for drinking and conspicuous consumption and being prone for profligacy. East Indians were seen by blacks and others as being miserly, being prone to domestic violence, acquiescent to authority, clannish and ‘heathen’ for not adopting ‘Western’ ways” (Yelvington, 1993, p. 9).

These stereotypes worked to the advantage of British imperialists insofar that a geographic and social divide between the two ethnic groups was a useful tactic in keeping both groups active and efficient within their noted economies. This dichotomous understanding of ethnicities also frames how contemporary researchers understand access to resources, as the “urbanized” North, to this day, is seemingly inaccessible to populations of those who live in South Trinidad; this is something I focus on within the context of my thesis. It is important to note that the take-away message we see from a colonial history of Trinidad and Tobago is that these two ethnically and geographically stratified groups who make up most of the population of Trinidad and Tobago today are framed as more or less privileged groups in contemporary literature as a result of colonialist tendencies that can easily be overlooked, especially given the current political climate in Trinidad. While it is important to take into consider this stratification in its contemporary sense, it is irresponsible to delve into such a topic without evaluating the colonial contexts that laid the foundation for these current realities to ring true.

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Meighoo notes that the ‘African-Indian’ interpretation (dichotomization) of politics in Trinidad “further distorts understanding by suggesting a two-party system in Trinidad and Tobago” (Meighoo, 2008, p. 103). This is simply untrue, as most parliaments have contained three or more political parties. There are no serious ‘supremacist’ or ‘nativist’ political movements, however, as noted, when considering issues of access, there is a clear disparity between those who can access medical institutions, and therefore experience an ideal treatment course versus those who cannot, and in considering this, there is an ethnic divide when taken into consideration the clustering of medical institutions to the North of the island versus the South.
Field Location

Trinidad and Tobago

Trinidad and Tobago sits on the continental shelf of South America at the southern end of the Caribbean, just off the northeast coast of neighboring Venezuela. Evidence indicates that Trinidad and Tobago were once part of the same mainland, separated about 11-15,000 years ago with the islands only 30 kilometers apart (Ministry of the Attorney General and Legal Affairs, 2017). As of July 2017, the population of this scenic country was at approximately 1,218,208 (CIA Factbook, 2017) with most taking up residence towards the western half of Trinidad and south of Tobago. With a landmass of 5,128 square kilometers Trinidad and Tobago is host to many beaches, caves, forests, and greenspaces making is a scenic and idyllic getaway. A tropical climate and average temperature of 28 degrees Celsius gives the island its rainy and dry seasons, characterized by waves of either wet or dry heat.

Since the 1960’s, Trinidad and Tobago’s economy has been dependent on the production and export of petroleum and gas. In a 2014 report published by the World Bank, it was reported that Trinidad and Tobago’s energy sector was responsible for 65.8% of all exports and 44% of the gross domestic product, however, only employed 3.1% of the country’s labor force. An underdeveloped non-energy sector attracts little investment, and relies mainly on government transfers and subsidies. The problem is further exacerbated by forecasts that at current rates of extraction, oil and gas fields will be fully depleted by 2025-2030 (Longmore, Jaupart, & Cazorla, 2014, p. 3). While there has been some diversification within the energy sector (geared towards creating more jobs in natural energy production versus petroleum and gas), nepotistic hiring practices and cultural stereotypes regarding gender means that it is still a huge challenge for women to be hired within these more profitable sectors. Instead, women tend to be found in low
paying jobs in the service and child care related sectors (Gender Affairs Division of the Ministry of Community Development, Culture and Gender Affairs, 2009, p. 22).

Compared to other Caribbean/Latin American countries, Trinidad and Tobago has a higher death and disability rate because of diabetes (Bonilla-Chacín 2013, 30). In 2008, diabetes was the second leading cause of death, after other cardiovascular diseases such as heart-attacks and strokes in both Trinidad and Tobago and Mexico making it an area of interest for this research project. In comparison, most Caribbean and South American countries, such as Nicaragua, Paraguay, and Venezuela, diabetes and complications relating to diabetes is the third leading cause of death. More about instances of diabetes in Trinidad specific to its Southern regions will be discussed in the next part of this chapter.

Trinidad and Tobago struggles with high levels of violent crime due to the interplay between a rise in gang activity related to unemployment, an increase in gun use, and lack of official capacity to deal with said problems. These hot-topic news issues are often shared on vigilante-type broadcasts such as “Crime Watch” and “Beyond the Tape”, where hosts collect on-the-ground often real-time video of crime and show them on their shows, typically unedited, with images of injured and dead bodies as the norm. The popularity of these shows, as well as the sharing of these graphic videos via social media, have added a new dimension to how the country is perceived by a larger international audience, with some suggesting that these images and crime statistics make it difficult for the country’s tourism industry to thrive. In attempts to repair the image of the country and address this pressing issue, the Inter-American Development Bank (IDB) has issued a report stating that the Caribbean needs to redirect its anti-crime efforts in favour of more interventions that are evidenced-based and targeted at high-risk individuals and geographic areas with improved monitoring of police and justice systems. The promotion of
research, targeting efforts based on demographics and geography, and monitoring already present systems for effectiveness is not a new perspective on the island, as it has also been raised regards to critiques of Trinidad’s current healthcare system, and the systemic marginalization and erasure of older individuals in lower-income areas that suffer from diabetes. Therefore, to better situate my study within a growing need for evidence-based and regionally-specific literature in Trinidad and Tobago, I chose to situate my field work in South Trinidad, which encompasses the San Fernando City Corporation, the Point Fortin Borough Corporation, the Penal-Debe Regional Corporation, and the Siparia Regional Corporation.

South Trinidad

South Trinidad is made up of the most southern Siparia Regional Corporation, which includes the urban centres of Cedros, Fyzabad, La Brea, Santa Flora and Siparia, the Point Fortin Borough Corporation which includes Point Fortin, Guapo, and Techer, the Penal-Debe Regional Corporation which includes Penal and Debe, and the San Fernando City Corporation which includes San Fernando and Marabella. In total, the population of South Trinidad hovers just over 245,400, with the Siparia Regional Corporation being the largest in area (495 square kilometers) and population (86,949) and the San Fernando City Corporation being the densest with an average population of 2,570 per square kilometer over 19 square kilometers. More information about the locations that make up South Trinidad can be found in Appendix 1.

South Trinidad, like the rest of the country, has very low unemployment relative to the number of working-age citizens, sitting at around at 4.4% (International Monetary Fund, 2014). While this is attributed to a government strategy to lower unemployment via social programs, inattention to growth patterns mean that the type of jobs created are not completely reflective of the real growth the country faces, as well as the general sense of workers productivity, that
being, job diversification and job creation in non-energy sectors are lacking, and lend way to patterns of underemployment throughout the population (International Monetary Fund, 2014, p. 7), namely in South Trinidad, where many are employed by the government sector in on-the-ground jobs. These instances of underemployment, compacted with a generally low minimum wage are combatted by regulations that prioritize job security and benefits to formal sectors of work, therefore, increasing levels of worker satisfaction and well-being. Health benefits and stipends are hallmarks of some of the employment opportunities for those employed by the government, and other larger corporations, such as Petrotrin in South Trinidad. On any given weekday, you can see Community-Based Environmental Protection and Enhancement Programme employees (CEPEP) on the side of main roads, clearing grass and cleaning the sides of gutters in their unmistakable bright green uniforms in teams of 5-7. Jobs like this are popular and are relatively sustainable for able-bodied men and women looking for full-time work and family-based health benefits.

There are two hospitals in the South West Regional Health Authority: Point Fortin Area Hospital, a newer hospital complex that is currently about 25% complete, and San Fernando General Hospital with an attached training/teaching hospital. Thirty-one other health care centres are located throughout the area, most of which operating only certain days during the week. These centres are usually the first place many go to get one-on-one advice from doctors or are seen by nurse practitioners. It was at these centres that many of my participants were given their official type 2 diabetes diagnoses. Lining the walls of some of the centres I visited were various pamphlets about ailments spanning from mouth abscesses, hemorrhoids to heart disease, high blood pressure, and headaches. More recently, visibly new pamphlets educating those on zika virus made an appearance in waiting rooms in health centres across the country. The popularity
over the 2016 Rio Olympic games made this Caribbean pandemic made the possibility of contracting zika at the forefront of everyone’s mind. Advice such as wearing long sleeved, light colored clothing and closed-toed shoes were among some of the tips listed in these pamphlets, all of which prepared by the Ministry of Health with instructions to explore their website for more information. Other available literature talked more about environmental factors, and urged homeowners to get rid of standing water, to wear insect repellent, and sleep with a mosquito net at night.

During my time in Trinidad, I lived in the village of Thick, located in the Siparia Regional Corporation. The village is where most of my maternal family currently lives and has lived for 2 generations. My grandfather, a retired oil field worker from Petrotrin, built the house 60 years ago. It has since undergone a few renovations, and now stands two stories tall to avoid any flood damage. A large black gate fences off the house from the road, two sets of neighbours, and the backyard bush. To one side, a side door was installed so neighbours can visit the house without having to walk on the side of the busy main street the houses face. On the other side is a popular bar and shop frequented by CEPEP employees once they reach the of the road or junction, and thus, end of their day. The bar/shop is owned by Rosa, who I had the opportunity to interview. Rosa is now blind, and her youngest son oversees the day-to-day operation of the establishment. They have known my family since before my grandparents got married and have been friends for decades. Locals and regulars try hard to make the area safe for the sake of the number of children and elderly women that live in the village. The bar is usually void of late-night banter, loud music, and car races, which are a staple of other bars in South Trinidad. Sunset during the rainy season in Trinidad is usually around 6 to 7 PM with lights out shortly thereafter. Taking advantage of the evening coolness and getting ready for bed relatively early means the
village has a comfortable night, with window screens left open and house gates locked. Most of the interviews conducted were at my grandparents’ house on their front gallery. There, we had a scenic view of the Thick Village bush, as well as any incoming traffic. The gallery had several power outlets so that mosquito-repelling devices could be plugged in during the evenings. There was a tenseness whenever someone in the house heard talking outside the house gates at night. On some nights, a gallery light would be left on, signifying that there were people inside the house, and that it was not left vacant for the night.

Power-outages were regular occurrences during my summer in Siparia. Most of the time, they would happen in the morning, for about a half-hour. Twice, there were scheduled power-outages, with announcements made via trucks driving through the winding village streets that made up Siparia via loud speakers. On these days, families would usually head out to the Gulf City Mall, or High Street San Fernando, a popular city strip with lots of shopping and eating locations. One or two-family members, usually male, would stay back to keep an eye on the house.

Field Location: Rationale

I wanted to situate my research in South Trinidad for several reasons. As mentioned previously, given that Trinidad and Tobago, within the past 10 years, was classified as a developing and then developed country makes it a unique opportunity to conduct research in an area teeming with social, economic, and technological innovation. The conceptualization, management, and treatment of type
Type 2 diabetes understood through an explanatory framework helps expose and juxtapose various environmental, social, political, economic, and historic factors that help the individual and community develop relevant, trustworthy diets, eating habits, and views on types of medicine.

In one of the most in-depth surveys done in the Caribbean in 1961, 23,900 Trinidadians had their blood and urine examined following a 100-gram glucose load to assess instances of type 2 diabetes. It was uncovered that “prevalence rates for East Indians, negroes and mixed races over 20 years old were 4.5%, 2.5% and 4.4% respectively” and that “in East Indians of 55-59 years of age the rate was as high as 14.7%” (Sinha, 1995, p. 913). This historic study has become the basis of contemporary work looking at instances of diabetes in Trinidad and is one of the first to specifically identify racial differences in diagnosis. This thesis elaborates on Sinha’s observations, focusing on the unique food culture of South Trinidad, using the village of Thick as a case study for evaluating instances where food is prepared and consumed as a community-wide activity. Aspects of race come supplementary to this, and, as I contend in this thesis, the proportion of those with type 2 diabetes and how they manage it is reflective of past measures of racial stratification exacerbated by current settlements and patterns in settlement.

Methodology

Introduction

The data collection phase of this study began in late June 2016, upon receiving ethics approval from the University of Guelph, and concluded in late August. Data were collected in the following ways:

1. Semi – Structured face-to-face Interviews
2. Pile-Sorting Activity
3. Participant Observation: Eid Celebration

4. Participant Observation: Debe/Penal and Fyzo Markets

**Explanatory Framework**

An explanatory framework model has been used by medical anthropologists to work towards understanding health practices and behaviours in specific cultural settings. Eliciting the patient’s (explanatory) model gives the researcher further knowledge into the beliefs that the participant holds about their illness, the personal and social meaning he attaches to their disorder, their expectations about what will happen to him and what the doctor will do, and their own therapeutic goals (Thesen, 2005, p. 87). Popularized by Kleinman (1976), an explanatory model looks at how health, illness, and health care-related aspects of societies are articulated as cultural systems. The explanatory model asserts that societal health is articulated as a cultural system, therefore, adaptive measures can be understood through said cultural practices (Kleinman, 1976, p. 87). Interviews, a trademark of ethnographic research, are known to “predominate the examination of the relationship between culture and diabetes” (Ferzacca, 2012, p. 418), therefore, using an explanatory framework within an anthropological lens allows us to see that an understanding of diabetes does not end with its “sufferers” (Ferzacca, 2012, p. 418).

The explanatory model and explanatory framework was discussed in various nutritional anthropological publications related to the treatment and conceptions of illness. Blum, Pelto, and Pelto use an explanatory model to better bridge their theoretical assumption of how problem-solving related to illness draws upon elements of cultural information and understandings “currently available within…respective social networks” (2013, p. 274). As such, my adoption of an explanatory framework using semi-structured interviews and pile-sorting activity has two goals: 1) To better understand the broader economic and environmental influences that influence
access to food, and 2) To better understand the complex interactions of local traditional health care methods alongside externally developed contemporary methods of treatment.

The appeal of an explanatory model, like many other models for health systems, is to “help construct reality and to lend meaning to a chaotic world”, of course, running the risk that “[these models] can be mistaken for reality itself rather than as one of way of organizing reality” (Weiss & Somma, 2007, p. 134). To overcome this criticism, I use the criteria of biological citizenship (Petryna, 2003, p. 49) to discuss the intersection of disease and illnesses, and its impacts on the individual and their family, thereby making the account more tangible and reflective of reality, instead of replacing one. Discussing individual and familial impacts via interviews is a method that I argue elicits emotional, personal insights on how the individual is experiencing their diabetes. These changes in familial behavior will be seen via an analysis on changing dietary habits because of efforts to control and manage the family member’s diabetes (supported by the questions, “How have your eating habits changed since your diagnosis? Do you find that your family’s eating habits have changed as well?”). In addition, as I will discuss further in this chapter, I made the decision to have only those who have participated in the interview be invited to participate in the pile-sorting activity. This was not only to ensure that the subject matter discussed in the interview would be elaborated on in the pile-sorting activity, but also to feel more in-charge of the information sharing process, as they were the ones handling the cards, grouping them by categories suggested by me (pile-sorting question of “What foods are considered good, bad or neutral for managing diabetes,” and debriefing questions wherein they had the option of creating more piles defined by their own categorizations) and discussing them all the while. Having the actual food cards as well, with general stock-images of the items, also elicited the opportunity to discuss how “realistic” depictions of these foods were on the internet.
versus real-life. More about how images were chosen will be discussed in the pile-sorting section of this methodology.

Another critique of the explanatory framework is the corroboration between biology and anthropology and the tendency to aggregate and simplify medical knowledge in favor of narratives and personal experiences deemed unscientific. Eisenberg and Engel more eloquently put this as a “rift between biological reduction[ism] and cultural relativist approaches” (Weiss & Somma, 2007, p. 130). Kleinman acknowledges this, and identifies this as an “inescapable feature of anthropological and cross-cultural health studies,” and therefore, must be known to the researcher, and will always be a point of criticism if not specifically addressed on a case-to-case basis (Weiss & Somma, 2007, p. 130) As such, it is understood that an explanatory framework is a more useful “research” tool, rather than a “treatment” tool, hence its use in ethnography. The classification of type 2 diabetes as a “the result of social and cultural processes related to change in quality and quantity of energy consumed and energy expended,” (Ferzacca, 2012, p. 412) therefore means that an explanatory framework, rooted in identifying the cultural and sociological rationales and experiences of interviewees, lends itself well to this thesis, as an exploratory research study rooted in ethnographic research.

*Illness Narratives in Anthropology and Clinical Medicine*

Farmer’s work in Haiti collecting narratives, and his developing relationships with participants during a time where new information was being shared and collected about HIV/AIDS in the 1980’s “offered a plot for stories of great immediacy to those living in a small village” (Ember & Ember, 2004, p. 44) wherein we could see the immediate application of the utility of his work, as well as the appreciation and reputation he has developed over time as a champion of applied medical anthropology. Putting narratives at the focus of medical
anthropological research was a discursive move meant to better situate findings within the social construction of disease. This corrected the tendency for writings and findings to have undertones in nosology, and thus, failing to provide a culturally relevant take on disease and illness. This can be traced back to Kleinman (Kleinman, 1988, p. 58), and his argument for the complex interaction between culture and nature. Patient accounts were now mobilized by their own explanations of etiology, and treatment of disease, and therefore, better reflective of objectives within the discipline of anthropology.

In clinical medicine, as it will be discussed in the literature review, there is a tendency to avoid the personalization of narratives to keep a more standardized, unbiased opportunity for the patient to receive adequate and fair medical care. The passive patient/active doctor dichotomy is played up, further exacerbated by the doctor (or institution’s) relative knowledge on illness and treatment, creating a hierarchy within the initial interaction, often subserviating the patient to someone who is unknowing, and undereducated. It was my objective to ensure that this power dynamic did not come across in my interviews, which is why the methods in which I implemented an Explanatory Framework allowed for participants to take control of the flow and direction of the conversation. As such, the subsequent pile-sorting activity followed a similar pacing and flow. I made my best attempts to ensure that there was an active participant/passive interviewer insofar that participants felt that, together, we created a temporary space where knowledge transmission about an inherently medical issue did not resemble conversations with doctors/in medical institutions that made them play a role of passivity.

Explanatory Framework and Diabetes

North American research into type 2 diabetes spearheaded efforts in understanding and collecting more nuanced accounts of those who identify as marginalized within contemporary
healthcare systems. In particular, studies focusing on immigrants, Indigenous persons, and people of colour aim to supplement, and uncover why these marked groups are more likely to be diagnosed with type 2 diabetes and what barriers to treatment look like. With regards to research in a Canadian context, comparative studies are used not only to present statistics on instances of type 2 diabetes, but how groups navigate through their diagnoses relative to each other. In doing so, there is a better opportunity to “support policy change and strategies…that enable more effective diabetes self-management” as a result of “eliminating disparities” to which identified groups (De Melo, de Sa, & Gucciardi, 2013, p. 11) are privy.

The use of an explanatory framework in a study of Indigenous communities in Canada has led to observations calling for the inclusion of community-based support in addressing a growing population of those with type 2 diabetes. Garro used an open-ended explanatory model framework to help participants with type 2 diabetes share their understanding of the history of the illness, its effects, and treatments (Garro, 1995, p. 39). As such, her results noted that the mass dietary change experienced by the entire community as a result of fertilizer, food additives, and an increase in snack foods high in sugar (Garro, 1995, p. 42), meant that diabetes, while experienced on an individual level biologically, was an inherently communal phenomenon experienced on such a scale.

Further evidence of the utility of an explanatory framework is mentioned by physicians reconciling the complexities in nehinaw (Cree) understandings of type 2 diabetes. When participants admitted that it “is the physician who is credited as the source of knowledge about diabetes”, a patients understanding of the illness “often involves integrating what they are told by health care providers within pre-existing explanatory frameworks and their own personal
experiences” (Bruyere & Garro, 2000, p. 3), therefore, a conceptual framing of type 2 diabetes is necessary for making sense of the experience.

What is understood about the explanatory framework and its use in contextualizing type 2 diabetes is that it reorients an understanding of the disease to that of the sufferer, and not the biology of the illness itself. I elaborate on this in the Literature Review under the section “Diabetes in the Caribbean Context”.

Semi-Structured Interviews

Interview participants were largely recruited through word-of-mouth from the help of family, friends, and community members, who let others know that I would be coming to the area to interview persons with Type 2 diabetes. Most interviews were conducted at participants' homes. Others took place at my temporary residence in Thick Village. I interviewed 22 participants between the ages of 21 to 90 with Type 2 diabetes. Information about participants can be found in Appendix 4. Most interviews took between 40 and 60 minutes. The average length of the interviews was around 50 minutes, with the shortest being 20 minutes and longest one at 2 hours. All participants are of Trinidadian descent and were currently living in the country.

I offered the participants the option of a written or oral consent form, to which all participants chose the oral form. Prior to beginning the interview, I read out the form to the participants, which offered them the opportunity to review information on the study, any potential risks, benefits, and compensation information. I provided each participant with the telephone numbers and locations of various healthcare clinics within the South Trinidad area, in case they wanted to follow-up with a medical professional after the interview or keep the sheet
for reference in the future. Most participants took the sheet of paper, while others chose to write the number down into appointment books or take pictures on their cell phones to review them later. I then asked if I could start recording the interview using a voice recorder. While most participants were fine with the use of the device, five participants preferred that I did not record the interview, for various reasons such as privacy and background noise. All 22 participants were comfortable with me taking hand-written notes. In the case of the 5 participants who did not allow the use of a voice recorder, more in-depth, detailed written-notes were taken to ensure I was able to collect enough information to review and disseminate. At the end of the interview, as a token of appreciation, I provided participants with a small travel-size bottle of hand-sanitizer and/or single-use bags of pre-packed green tea.

My initial semi-structured interview question guide included 10 questions aimed at developing insight towards what every-day, and special-event eating habits looked like, and what types of folk and/or contemporary medical treatments were used to manage diabetes. Through editing and practice interviews with volunteers in Canada and Trinidad, I reformatted the interview questions into three question sets, the first set with six general demographic-based questions, the second set with eight questions and the third set with two. The second set included questions focused on food, consumption patterns and consumption changes. I specifically asked if the participant’s eating habits changed since being diagnosed with diabetes, and what these changes looked like. I then asked them to take me through a few typical days of what food consumption looked like (a typical work day, weekend, special event), and about any favorite, go-to meals they had. The questions encouraged participants to remember and impart a memory-based narrative and list food items, cooking methods, and any habit-based behaviors that they may otherwise overlook due to its repetitiveness or mundaneness. I then asked where they
shopped for groceries, and what staples were on their weekly/monthly grocery lists. The third set of questions focused more about the participants experience about diabetes management beyond dietary change, such as the use of prescribed medication and folk-medical treatments. I also asked about how they managed changes to everyday activities to accommodate blood sugar testing, medication, doctor’s visits, and blood sugar regulation via snacking/small meals.

Dividing the interview into these two parts was helpful, as it was easier for participants to focus more on their specific experiences with food and consumption. These questions were more in-depth and personalized, and expressed more variation in answer than the first set of questions. After a short break (around 2-5 minutes), we then began the third part of the interview, where discussion of food sometimes continued, but where the ultimate focus was on different ways of managing diabetes. It also allowed me to better adhere to aspects of the explanatory framework model, wherein participants are more willing, and are eased into drawing their own understandings of the relationships between health practices and their specific cultural settings, especially since they were encouraged to think about special events, dietary changes that happened throughout their lifetime. Dividing the interview into these three sections encouraged participants to better reconcile the relationship between every day eating habits and managing the reality of their diabetes. Participants had the opportunity to share beliefs that they had about their illness, and the personal and social meanings that generally inform the use of folk and/or traditional medical treatments. The explanatory framework lends itself very nicely to the open-

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5 These questions were asked to be reflective of an explanatory framework, in the case that participants needed me to mention that it was okay to talk about their everyday lived experiences, and that this was still part of an overall discussion of diabetes.
ended nature of the questions, but also the interdisciplinary way that I aim to discuss findings of this study. A copy of the interview guide can be found in Appendix 2.

Interviewees who seemed particularly interested in the subject matter were also invited to participate in a pile-sorting activity, based on their level of interest and engagement shown while conducting the interview. Some participants were willing to do the pile-sorting activity immediately following the interview, while others made time later. The activity was done to elicit a more detailed discussion about food, food preferences, and ingredients (Pigford et al, 2012, p.987).

Table 1: Recruited Participants/Participant Profiles

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Age</th>
<th>Profile</th>
<th>Diagnosed/Number of Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aminata</td>
<td>74</td>
<td>Former hotel maid, stay-at-home mom, Admittedly overweight</td>
<td>N/A</td>
</tr>
<tr>
<td>Paula</td>
<td>54</td>
<td>Babysitter, former cook at a casual fast-dine restaurant, Admittedly overweight</td>
<td>N/A</td>
</tr>
<tr>
<td>Nancy</td>
<td>37</td>
<td>Nurse, Admittedly overweight</td>
<td>7 years</td>
</tr>
<tr>
<td>Maggie</td>
<td>60</td>
<td>Caretaker, former cashier, Admittedly overweight</td>
<td>N/A</td>
</tr>
<tr>
<td>Rosa</td>
<td>75</td>
<td>Bar owner/barkeeper, Admittedly overweight, has lost weight in the past 2-3 years</td>
<td>8 years</td>
</tr>
<tr>
<td>Name</td>
<td>Age</td>
<td>Recent weight-loss</td>
<td>Weight Loss Duration</td>
</tr>
<tr>
<td>---------------</td>
<td>-----</td>
<td>--------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Salisha</td>
<td>60</td>
<td>Recent weight-loss (20-25 lbs)</td>
<td>4-5 years (approximation)</td>
</tr>
<tr>
<td>Sally</td>
<td>58</td>
<td>Admittedly overweight, has lost 10-15 pounds this past year</td>
<td>N/A</td>
</tr>
<tr>
<td>Gina</td>
<td>22</td>
<td>Recent secondary school graduate</td>
<td>N/A</td>
</tr>
<tr>
<td>Suzanne</td>
<td>64</td>
<td>Principal of a secondary school, former teacher Admittedly overweight, has been losing weight due to diet this year</td>
<td>4 years</td>
</tr>
<tr>
<td>(Name withheld)</td>
<td>61</td>
<td>Government worker (Employed through a program that connects women with jobs in the community; currently working as an office cleaner)</td>
<td>20 years</td>
</tr>
<tr>
<td>Nina</td>
<td>57</td>
<td>N/A</td>
<td>19 years</td>
</tr>
<tr>
<td>Hanna</td>
<td>58</td>
<td>Store clerk Admittedly slightly overweight</td>
<td>4 years</td>
</tr>
<tr>
<td>Sima</td>
<td>52</td>
<td>Geriatric Nurse</td>
<td>4-5 years</td>
</tr>
<tr>
<td>Mona</td>
<td>N/A</td>
<td>N/A</td>
<td>Could not recall</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Swimming coach, aspiring teacher</td>
<td>Young age (no specifics)</td>
</tr>
<tr>
<td>Dennis</td>
<td>60</td>
<td>Retired, former production supervisor Admittedly overweight</td>
<td>8 years</td>
</tr>
</tbody>
</table>
Pile-sorting Activity

Pile-sorting activity participants were required to have completed an interview first, allowing the activity to act as an elaboration of themes and ideas they introduced. All pile-sorting participants were earlier interview participants. This was done to ensure that participants were aware of my research, and the context of the pile-sorting activity. Given that the pile-sorting activity had the potential to run long (since the participants had a choice in how many cards they wanted to use), I wanted to specifically reach out to interview participants who seemed interested and able to sit down with me to discuss such subject matter. The interview and pile-sorting activity, while two distinct forms of data collection, allowed for the participant to link broader ideas and themes on their own, and provide an oral and physical opportunity to express ideas about their consumption and dietary habits, thereby satisfying the objectives of the use of an explanatory framework. The pile-sorting activity either took place at their homes, or at my residence in Thick Village. Participants were asked to look at, and read cards with images and the names of various foods both raw and unprepared; therefore, literacy and sight were implied criterion. The activity was meant to elaborate and expand on subject matter discussed in the interview, specifically, to introduce the names of local cuisine and food products used in folk medical treatments.
In total, I created 99 8cm x10cm laminated cards with color images of foods/meals on them. I looked for popular pictures searched in Trinidad and Tobago using a Google image search. The question “what foods are considered good, bad or neutral for managing diabetes” was first asked, with a few debrief questions asked after the cards had been sorted. In most cases, participants moved cards around while being asked debrief questions, and answered them using the cards as well. To keep track of the piles, I recorded which cards went into each category by writing it all down, mostly in short-form (for example, Soursop would be ‘ssop’ and avocado would be ‘avocado’). Since the debrief questions gave way to participants creating new piles of cards, I recorded the titles and contents of these piles as well. I will go into the categorization of these foods based on the questions later in my analysis discussion.

Below is a list of all the food items and meals that were printed on each of the pile-sorting cards:

**Table 2: Raw Ingredients and Staple Foods**

<table>
<thead>
<tr>
<th>Soursop</th>
<th>Celery</th>
<th>Breadfruit</th>
<th>Grapefruit</th>
<th>Coconut Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorrel</td>
<td>Avocado</td>
<td>Caraaili</td>
<td>Banana (ripe)</td>
<td>Tamarind</td>
</tr>
<tr>
<td>White Rice</td>
<td>Chicken</td>
<td>Beef</td>
<td>Plantain</td>
<td>Milk</td>
</tr>
<tr>
<td>Condensed Milk</td>
<td>Cheese</td>
<td>Noodles</td>
<td>Red Beans</td>
<td>Bread</td>
</tr>
<tr>
<td>Soy Sauce</td>
<td>Red Fish</td>
<td>Black-eyed peas</td>
<td>Cassava</td>
<td>Chickpeas</td>
</tr>
<tr>
<td>Potatoes</td>
<td>Saltfish</td>
<td>Yams</td>
<td>Roti</td>
<td>Corned Beef</td>
</tr>
<tr>
<td>Goat</td>
<td>Duck</td>
<td>Soya Chunks</td>
<td>Pork</td>
<td>Greens</td>
</tr>
<tr>
<td>Olive Oil</td>
<td>Spinach</td>
<td>Shrimp/Seafood</td>
<td>Okra</td>
<td>Bodi</td>
</tr>
<tr>
<td>Split Peas</td>
<td>Lentils</td>
<td>Banana (green)</td>
<td>Bok Choy</td>
<td>Sugar Cane</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Oranges</td>
<td>Corn</td>
<td>Sweet Potato</td>
<td>Yams</td>
</tr>
<tr>
<td>Cabbage</td>
<td>Carrots</td>
<td>Eggplant</td>
<td>Bake</td>
<td>Pigtail</td>
</tr>
<tr>
<td>Pumpkin/Squash</td>
<td>Mango</td>
<td>Papaya</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Prepared Foods/Meals

<table>
<thead>
<tr>
<th>Prepared Foods/Meals</th>
<th>Doubles</th>
<th>Fried Chicken</th>
<th>Stew Chicken</th>
<th>Stew Pork</th>
<th>Curry Chicken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curry Goat</td>
<td>Curry Beef</td>
<td>Stew Beef</td>
<td>Fried Rice</td>
<td>Callaloo</td>
<td></td>
</tr>
<tr>
<td>Macaroni Pie</td>
<td>Roti</td>
<td>Curry Crab/Seafood</td>
<td>Palau</td>
<td>Ground Provision Soup</td>
<td></td>
</tr>
<tr>
<td>Dumplings with Sauce</td>
<td>Stir-Fry</td>
<td>Curry Chickpeas</td>
<td>Saffron Rice</td>
<td>Cheese Sandwiches</td>
<td></td>
</tr>
<tr>
<td>Meat Sandwiches</td>
<td>Cake</td>
<td>Sweet Drinks</td>
<td>Pone</td>
<td>Kurma</td>
<td></td>
</tr>
<tr>
<td>Coconut Brittle</td>
<td>Stewed peas/lentils</td>
<td>Boiled provision</td>
<td>Curry potatoes</td>
<td>Fried Plantain</td>
<td></td>
</tr>
<tr>
<td>Veggie stir-fry</td>
<td>“Chinese Stew”</td>
<td>Pepper shrimp</td>
<td>Fried okra</td>
<td>Fried aloo</td>
<td></td>
</tr>
<tr>
<td>Fried fish</td>
<td>Saltfish and tomato</td>
<td>Tomato choka</td>
<td>Fried bake</td>
<td>Chow</td>
<td></td>
</tr>
<tr>
<td>Dhal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To choose the meals included on the pile-sorting cards, I consulted a study done by Ramdath et. al. where the nutritional composition per 100 grams were calculated as per recipes collected and tested (Ramdath, Hilaire, Brambilla, & Sharma, 2011, p. 37). A copy of the questions I asked during the pile-sorting activity can be found in Appendix 3.

Participant Observation – Eid Celebration

On June 28th, 2016 I was fortunate enough to attend an Eid celebration hosted by a family in Thick, Siparia. Much like other holiday celebrations in the Caribbean and North America alike, invited guests need not have to be part of the Islamic faith to attend. The Eid celebration in many ways is an unofficial beginning of summer gathering for many in the community to bring their children, who would have at this point, ended, or have almost ended school for the year. The family hosting the event ordered a large bouncy castle in preparation for the bevy of excited, high-energy 4 to 12-year-olds expected to be in attendance. The event was held from 2 PM until
around 10 PM, with preparations beginning by about 4 AM the day-of. Many of my interview
participants attended this specific Eid celebration, therefore, ensuring to me that they were
recently exposed to several “special occasion” foods spanning from ‘buss-up-shot’ roti, curried
goat, birthday cake pre-packaged from the grocery store, and special desserts such as sawine and parsad. It was good having this experience clear in their mind as well, as I often would use it as an example of a special occasion, and reference some of the foods that were prepared, and eaten on the day of the celebration.

I able to help with the preparation of the food for this event, which all happened outside
over open flames in the basement/garage portion of the hosts’ house. Two items were prepared
indoors; the sawine and parsad. Both were prepared in the upstairs kitchen by female family
members, made in specific pots designated for sawine/parsad making. Being a female, I was able
to help stir the parsad pot and package the sweet, malleable dessert into small plastic bags for
attendees to take home at the end of the night.

Food was put into buffet warmers and covered with cloth tablecloths between periods of
people eating to keep everything warm/free of bugs. Tables and chairs were set up around the
open, scenic garage area. Attendees filled their paper plates with homemade food and shared roti
from communal places placed in the middle of tables for convenience. Sweet drinks, juice, and
water were kept in coolers spaced throughout the garage, with many opting to drink Sprite, Coke

6 ‘Sawine’ or ‘sewine’ is a popular dessert soup made with milk, sugar, vermicelli noodles,
cinnamon, and raisins. It is made in preparation for Eid ul fitr, and sometimes for other large-get-togethers to share
7 ‘Parsad’ is a popular flour desert made with evaporated milk, sugar, cardamom, raisins, ginger,
butter or ghee and flour. It is made in preparation for Diwali in specific pots that are specifically for this dessert.
Light (Diet Coke), and various flavors of Chubby (a popular sweet drink with dozens of flavors) to wash down their meals, and keep hydrated on this hot, late-June day.

No alcohol was consumed at this event, as the patriarch of the host family abstains from alcohol. Still, without any malice, attendees would head to a neighbor’s house, or my grandfathers for a drink of coconut water and rum, or a shot of Absolut Vodka before or after their meal. Chutney mixes played from speakers, with the younger children in attendance changing the song, and taking requests from adults. A stack of to-go Styrofoam containers was dropped next to the food at around 7 PM, with attendees filling up one or two to take home. The entire event was attended by well over 200 people between its 8-hour running time.

The 200+ event attendees allowed for me to get a sense of what the Siparia “community” looked like. The public (“all are welcome”) yet private (as in, this was a private party) aspect of this celebration also helped me round out ideas of what the setting of my research looked like. These 200+ attendees were, for the most part, the community wherein those with diabetes emerged as biological citizens. When participants mention their neighbors and friends from the Siparia area, chances were that they were all in attendance at this, or other events like this, therefore making these events a space where information sharing happened.

Participant Observation – Debe/Penal and Fyzabad Markets

Every Wednesday and Sunday, those in the Thick village community would travel to Debe/Penal and/or Fyzabad (Fyzo) respectively for their farmer’s markets. I went to the Sando Markets July 10th, 17th, and 24th, and the Penal/Debe markets on August 3rd and 10th. Held from 5 AM until around 1 PM, these markets drew in high numbers of shoppers and local vendors. On any given Wednesday, an estimated 2,000 persons would come through the Debe/Penal market,
and an estimated 1,500 to 2,000 would pass though the Fyzo market on Sundays. Both market spaces consisted of a sheltered area where most vendors laid out their spreads of zucchini, eggplant, carali, okra, green beans, tomatoes, various hot peppers, aromatics, watercress, potatoes, yams, eddoes, corn and fruits such as papaya, mango, chennet\(^8\), portugals\(^9\), and bananas. Permanent fixture areas, where there was running water available, were set up some years ago to bring fresh meat and fish to these markets. Attendees could purchase fresh goat, chicken, beef, wild local fish (namely redfish), and call ahead for more specialized items such as pork and lamb cuts. Baked goods were available nearer to the entrance of the large market spaces, with sugar cakes, small meat pies, kurma, galub jamun, pound cake, rum cake, and sponge cake available. Market regulars usually had their favorite “hand” to go to, that is, their favorite vendor who they would visit weekly. This contrasted how vegetables and fruit were purchased, as more bartering would be done for these foods versus homemade baked goods.

Almost every veggie/fruit vendor had an “outside” selection, meaning, several products that were imported, such as apples, cherries, strawberries, leaf lettuce, plums, and/or garlic. Given the mix and overlap of some of these items, popular questions heard at both markets were, “Which is local?” or, “Is this local?”.

These markets, in recent times, have been the site of petty crimes, with those engaging in this activity opting to steal money from purses, to lifting full bags of purchased groceries from unsuspecting customers. To combat this, one vendor I spoke to mentioned that people come with

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\(^8\) Commonly known as guinep, or Spanish lime

\(^9\) Citrus fruit, another name for locally grown tangerines/mandarins
more family members now; someone to hold the money and one or two others to hold the bags. It is not uncommon to see younger children standing by bags near the market’s entrance while playing on their phones, waiting for their parents to finish the shopping.

Outside the covered market spaces are a handful of other vendors, mostly selling clothes bags, nail polish, and other toiletries. A number of food trucks line the parking lot, where many sit on makeshift chairs made out of empty vegetable and fruit containers to enjoy their hot, fresh doubles\textsuperscript{10}, aloo pie\textsuperscript{11}, or pholourie.\textsuperscript{12} Their prices, non-negotiable, are higher on market days, as they must pay a premium for a parking spot, as the parking lot is not owned by the market, and instead is on private property right next to the market spots. Still, long lines surround the trucks, with many eager for a quick fried snack to satisfy their hunger pangs.

\textsuperscript{10} ‘Doubles’ is a popular street food in Trinidad and Tobago, made with two baras (flat fried bread) and filled with curried chickpeas. Other aromatics and sauces, such as tamarind sauce, can be added to taste

\textsuperscript{11} ‘Aloo pie’ is a fried dumpling filled with boiled and spiced mashed potato (aloo being the Hindi word for ‘potato’)

\textsuperscript{12} ‘Pholourie’, a popular snack food, is a fried, spiced dough ball made with flour, ground chickpeas, water, and spices, served with chutney
Figure 1 Left: Eddoes; Bottom right: Yams; Top Right: Local lemons

Figure 2 Centre right: home-made pone (arrowroot cake) individually packaged ready for sale
Figure 3: Left: Potatoes; Right: Scale used to weigh and price potatoes

Figure 4: Right: Large leafy greens; Middle: Bananas; Right: Eddoes/Yams
Figure 5 Left: Celery; Middle: Eggplant; Right: Young Eggplant Bush

Figure 6 Bottom: Plantains; Middle: Bananas
Figure 7 Outside the market; blankets/towels with prints of cartoon characters being sold

Figure 8 (Starting from furthest back): Farm eggs, yellow onions, garlic (bottom) cheese (top), potatoes
Participant Observation – 25th Annual Diabetes Symposium

On Saturday July 23rd, 2016, I attended to the 25th Annual Diabetes Symposium at the University of the West Indies (UWI), Saint Augustine Campus. I travelled to the conference with the Siparia branch of The Diabetes Association of Trinidad and Tobago, where we travelled as a group from San Fernando to UWI. The theme of the conference was “Diabetes Prevention: It starts with the child” and was well attended with a predicted attendance of 225 attendees. A focus on teaching and implementing healthy lifestyle habits rooted in diet and nutrition was apparent, and so was the relationship between a need for social and scientific understanding of diabetes. Speakers and presenters echoed this theme, lamenting about how, after years of the conference and development within the country, there is an undoubted “dysfunctional relationship between the hand and mouth and fork.” Minister of Health Care Terrence Deyalsingh discussed diabetes not as a medical problem, but a social and societal one. The solution, he went on to discussed, is to be found outside of pharmaceuticals and hospitals, but instead, should be reflected on more concrete, deliberate policy-driven intervention as well as on the home-front, with parents ensuring that their children receive proper nutrition, and develop a healthy relationship with food that translates into a healthier adolescence and adulthood.

Before I arrived at the conference, I met up with the Siparia branch of the Diabetes Association of Trinidad and Tobago outside a church in San Fernando. The group, consisting mostly of women and one man, were wearing bright blue shirts with the words “Siparia Branch” on the back. As we piled into the hired maxi taxi to UWI, I had the opportunity to chat with some of the group. Older in ages, most of the Siparia branch joined to keep in touch with others in the community who are always on the lookout for new ways of managing and controlling their diabetes. Going to the conference is a yearly excursion for them; something that they look
forward to fundraising for, and attending. Most were excited to hear, and see government officials, namely Minister Deylasingh, who is always in attendance, sometimes with his family. A resource fair is available for attendees to walk through between presentations and during lunch, with many booths hosted from a wide array of vendors. The most visible, and perhaps, most controversial vendor and sponsor of the event was Nestle. Nestle sponsored a Youth Coloring Competition where winners from schools across the whole island won a nicely packaged set of fruit juices from their Orchid brand; a staple in Trinidad and across the Caribbean. After Minister Deylasingh took the stage, a representative from Nestle gave her own welcoming remarks, letting everyone know of the free samples of Orchid Lite, a drink designed with diabetics in mind.

After welcoming activities, different speakers were announced to be in different rooms/areas of the UWI campus. Opportunities to attend lectures, and presentations by some resource fair participants were well-attended by curious spectators. A poster fair, hosted by UWI medical students, was a popular attraction before lunch with colorful posters lining the main dining area. Lunch was served from noon until 1 PM; a heart-healthy, low-calorie affair of chicken stewed in orange juice, lentils, spiced rice, and salad. After lunch, there was two other sets of lecture times and then closing remarks from the Diabetes Association of Trinidad and Tobago.

The symposium provided me as a researcher with the interesting and unique experience of seeing a diverse group of stakeholders in one arena. Policy-makers, blood sugar tester makers, food producers, holistic medical practitioners, and those young and old with types I and II diabetes were in attendance. More about my experience will be discussed in the qualitative findings section of this thesis.
Data Analysis

Thematic analysis was first done on transcripts collected during interview sessions and notes taken during the pile-sorting activity, followed by participant observation notes. Prior to the analysis done on the interview transcriptions there were no set codes, ensuring that the analysis was data-driven (Braun and Clarke 2006, 83). I then read the transcription of each interview and using NVivo10 software, highlighted any notable quotes, ideas, and themes that best represented the participant’s responses. Once all transcripts were re-read for these more general highlights, I revisited these transcriptions and coded using the “Node” feature on NVivo10.

The most robust source of data during my time in the field came from the semi-structured interviews I conducted. In total, I interviewed 22 people all diagnosed with type 2 diabetes. The following is a breakdown of the most popularly noted cereals, starchy foods, poultry, oils/fats, meat, fish, dairy products, sugars and ‘other’ foods mentioned in the interviews. The colored checkmarks indicate the meals (breakfast, lunch, dinners, snacks). These categories I used to categorize the types of food come from the official Food and Agriculture Organization of the United Nations, and their 2003 Nutrition Country Profile on Trinidad and Tobago.

Table 4: Breakdown of most popular foods mentioned by participants

<table>
<thead>
<tr>
<th>Cereals</th>
<th>Starchy Roots</th>
<th>Sweeteners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice ✔✔✔</td>
<td>Plantain ✔✔</td>
<td>Sugar Substitutes ✔✔</td>
</tr>
<tr>
<td>Flour ✔✔✔</td>
<td>Eddoes ✔</td>
<td>Honey ✔</td>
</tr>
<tr>
<td>Roti, saada, homemade ✔✔✔</td>
<td>Green Banana (fig) ✔</td>
<td></td>
</tr>
<tr>
<td>Bread, sliced ✔✔✔</td>
<td>Sweet Potato ✔</td>
<td></td>
</tr>
<tr>
<td>Pound cake (home made, ✔</td>
<td>Taro ✔</td>
<td></td>
</tr>
<tr>
<td>Bake, homemade ✔✔✔</td>
<td>Potato Patties ✔</td>
<td></td>
</tr>
<tr>
<td>Buns/bakery bread (different from sliced bread) ✔✔✔</td>
<td>Samosas ✔✔</td>
<td></td>
</tr>
<tr>
<td>Boxed cereal ✔</td>
<td>Curried Potato ✔</td>
<td></td>
</tr>
</tbody>
</table>
With this community and methodological background in mind, I now move into my review of the literature.
Chapter 3: Literature Overview

In this chapter, I engage with the growing body of published research and literature that explores how type 2 diabetes is conceptualized as a social, biological, and medical phenomenon in South Trinidad. I divide this literature review into two sections. The first section looks at themes in medical anthropology, starting with structural violence. I then go on to introduce Foucault, and the medical gaze, as a precursor to situating Petryna’s definition of biological citizenship (Petryna, 2003). This is followed by a discussion of the oppression and empowerment models of patient-physician care, popularized by Thesen (Thesen, 2005). From here, I move on to a larger discussion of the delocalization of food systems. The second section looks at themes in cultural and nutritional anthropology.

The complexities of identity, and institutions that advocate and influence ideas of “health” are discussed in the second section of this literature review where I discuss the specific use of food as a means of managing and controlling diabetes, as it is an accessible, and cost-effective way to construct an ideal, healthy, transformative diet. What constitutes as healthy, however, depends on the context an individual takes on health and access to information. I engage with works on nutritional anthropology to better contextualize the comments and insights that I encounter by my participants related to their individual diets, and their conceptions of health. This comes because of new found knowledge on diet/disease management, as well as the oral histories and knowledges that have been shared and passed down to inform ideas of health in a context unique to South Trinidad. Both sections converge with regards to ideas about the necessity of food, and utility of consumption.
Introduction

The development of contemporary literature in medical anthropology has been spearheaded in part by anthropologist Paul Farmer and his work on structural violence (Farmer, 2004). Analyses of structural violence uncover, evaluate, and overcome embedded processes within political and economic organizations that put individuals and populations in harm’s way, conspiring to constrain individual agency (Burtle, 2010). To supplement these claims, and further delve into its importance in exploring the social and medical phenomenon that is type 2 diabetes, I use the term biological citizenship, which refers to the collective claims made by a group of individuals who have undergone a physical change as per the results of structural violence (Petryna, 2003). The literature I discuss in this section outline the history of ‘biopower’ that inform both these definitions, and how studies in both terms touch on the politicization of institutions and the human body respectively.

Nutritional anthropology oversees the growing body of literature on biocultural perspectives of food and consumption, lending itself well to supplement works on broader facets of medical anthropology, especially wherein food becomes a means of treatment and control of specific ailments. In this section, I will define “traditional”, “contemporary” and “folk” as individual terms and as prefixes to food and medicine. I will also briefly discuss the pre- and post- colonial influences that have informed waves of dietary change in South Trinidad. The literature I discuss in this section emerges from an anthropology of food and the senses, and how this informs folk ideas of food, history, and deservingness. Finally, looking at processes of
localization, delocalization, and relocalization provides insight towards the diverse factors as of recently that has led to a change in Siparia’s food system.  

From the Biomedical to the Social – understanding type 2 diabetes through a medical anthropological lens

Structural Violence

By naming and contemporizing structural violence, there is an opportunity to identify and address “the social machinery of oppression”, which is the result of many conditions, but ultimately tied to a question of power, both relative and exercised (Farmer, 2004, p. 307). In studying structural violence, Farmer challenges anthropologists to look beyond an ethnography of the “living”, and instead, to recognize that to understand and synthesize accounts of disease and suffering, there needs to be a “bringing of links – whether termed social, biologic, or symbolic – into view”, for without this, “suffering is muted or elided altogether” (Farmer, 2004, pp. 307-308). Specifically, in the field of health, “ethnographic work relies on conversations with the living – or on the records left by the literate”, and therefore, is an incomplete picture, and that “an anthropology that tallies the body count…must look at the dead and those left for dead” (Farmer, 2004, p. 207).

In using the term and ideas of structural violence, I argue that type 2 diabetes in the context of South Trinidad is more than just a biomedical issue, and instead is one of greater social, biologic, and symbolic meaning and relevance. Identifying instances of structural

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13 In this context, I use the term food system to represent “set of activities and relationships that interact to determine what, how much, by what method and for whom food is produced and distributed”, including the “globalized networks of knowledge production, on- and off-farm technologies, production, consumption and regulatory systems” (Galt, 2013, p. 637).

14 While the criteria I had for interviews was anyone that lived in South Trinidad, my participant observation happened exclusively in Siparia, therefore, my discussion of food systems are specific to the Siparia region.
violence when studying type 2 diabetes and other popular medical phenomena is not new, especially since institutions responsible for creating oppression are more easily seen and critiqued when they are direct stakeholders in one’s ability to ensure basic human rights, such as food and healthcare. Dossa (2013) discusses how she could uncover the layered, nuanced impact of structural violence through examining memory as narrative texts and culinary performance during her time interviewing woman Afghani refugees in Vancouver, Canada and Quetta, Pakistan. Like Farmer (2004), Dossa goes beyond using just texts and narratives, and looks at performances and the art of a mediated anthropology to enhance her ethnographic research and findings, noting that understanding structural violence identifies ways in which violence is “normalized as part of an everyday reality”, and the complementary concept of structural vulnerability “brings to light the workings of interlocking factors such as race, class, and gender” (Dossa, 2013, p. 435). The implicit, overlooked aspect of normalized structural violence is mirrored in the everyday, ritualistic task of food preparation done by woman (usually older ones) in the household. By empathetically engaging in a conversation and witnessing a performance laden with memories of suffering Dossa (2013) inadvertently appeals to ideas of reconciliation, adaptation, and resilience. It should be noted that Dossa attributes some of her success and ability to unlock a discussion of structural violence, and ethically tap into intimate narratives and performances of vulnerability in part to being an “indigenous ethnographer” (2013, p. 436), mindfully eschewing the possibility of constructing her participants as the Other.

The distribution of disease can be understood as “historically and economically driven” (Farmer, 2004, p. 317). Addressing structural violence from a health perspective means uncovering instances wherein power exploits and oppresses, resulting in poor healthcare (or lack thereof), and thus, further exacerbates a history of illness justified initially by a lack of adequate
economic resources. Recognizing structural violence in the context of diabetes means addressing the systematic ways that emerging social structures can both harm those diagnosed with diabetes, and harm those who are at the risk of diagnosis due to their exposure to risk factors that might include poor nutrition, limited access to healthcare, and not enough knowledge to treat or prevent diabetes. In a study done by Maar, Manitowabi, Gzik, McGregor and Corbiere (2011), the concept of structural violence is used to analyse proximal and distal interventions available to First Nations people living with type 2 diabetes in Canada. In the case of this historically marginalized population, individual-focused approaches to treatment have not led to significant improvements in diabetes management and instead, have emphasized the role of patients as wholly responsible for their past, present, and current state of health and healthcare; this place blame on individuals for their poor health outcomes. This culture of blame is reflective of historical and contemporary issues stemming from the colonial history of “disempowerment, poverty, stress, and marginalization” (Maar, Manitowabi, McGregor, & Corbiere, 2011, p. 11) that First Nations communities face with regards to not only their health, but political and social agency.

The embedded nature of structural violence within a Caribbean context is important to note given the state of unequal development and industrialization seen as a comparison of the urbanized areas of North Trinidad versus the relatively underdeveloped South Trinidad. As discussed previously, South Trinidad is characterized by a lower than average level of household income, as well as access to fewer hospitals. Participants I interviewed often discussed instances where local pharmacies did not have their prescribed medication on-hand, which meant they were forced to either pay out of pocket for more expensive alternatives, to skip or take half-doses, or borrow medication from neighbours or other family members. What this means is that
addressing the potential for structural violence can help develop institutions that are transparent, empowering, and that ultimately promote health and wellbeing for all community members, and not just those who are at a political, economic, or geographical advantage. Therefore, a critical look at the literature surrounding structural violence gives way to further legitimizing it as subject matter that helps round out some of the complexities and nuanced issues explored in this thesis.

Biological Citizenship

Foucault’s studies on “bio-power” demonstrate how basic biological features of humans can become the object of political, or more general strategies of power (Stein, 2001, p. 333). As such, Foucault explores his work on bio-power by investigating where and how, between whom, between what points, according to what processes, and with what effects power is applied (Foucault, 2007, p. 2). In Birth of the Clinic (1973), Foucault looks at the individual body, and how it can be spatialized by illness and medicine (Foucault, 1973, p. 10). The most poignant of his terms is that of the “medical gaze”, which is best described as “the epistemological shift of early modernity that led to the development of biology as a form of knowledge…from a body with permeable boundaries and…humors organs…each of which had its place and purpose within a living organism” (Shaw, 2012, p. 112). In his own words, Foucault uses the medical gaze to explain how in order “to know the illness from which [one] is suffering, one must subtract the individual, with his particular qualities” (Foucault, 1973, p. 14). What this results in is an “individual [that] was merely a negative element, the accident of the disease, which, for it and in it, is most alien to its essence” (Foucault, 1973, p. 15). Foucault believed that in the space of disease, doctors and patients are considered “tolerated disturbances” (Foucault, 1973, p. 9), 15

15 About the person holding the medical gaze (for example, the physician).
stressing that within the gaze there are three parties: the doctor, patient, and disease. From this separation, we can understand dynamics of power between the three identified actors. Understanding these dynamics of power, Foucault subverts the more passive patient identity as now the host of the disease, and therefore, an individual body by which all medical information should be based upon, calling on the belief that each individual body is unique in its own display of illness. The following quote frames his line of thinking with regards to medical perception, and the power of those who hold the gaze:

“Medical perception…must be structured as a look through ‘a magnifying glass, which, when applied to different parts of an object, makes one notice other parts that one would not otherwise perceive’, thus initiating the endless task of understanding the individual”…“The patient is the rediscovered portrait of the disease; he is the disease itself… ‘One must render the patient’s own infirmities, his own pains, his own gestures, his own posture, his own terms, and his own complaints’ (Foucault, 1973, p. 15)

Here, Foucault expresses the importance of the individuality of the patient while commentating on the power the disease has over the patient’s body, and what the holder of the gaze can do to ensure that the individual (patient) still has their identity (beyond that of the illness) as an input in understanding, and subsequently overcoming disease. However, what Foucault fails to take into consideration the relative power between that whom holds the gaze that who the gaze is cast upon.

Shaw uses Foucault’s insight on the medical gaze to identify the clinician as a “privileged reader of the medical body”, compared to the body of the patient which becomes the “terrain on which the new theories of ‘life’ [are] founded” (Shaw, 2012, p. 113). Effectively, Foucault’s suggestion and tenacity for recording such medical happenings (patient’s temperature, pulse, breathing (Shaw, 2012, p. 115)) and aspects of the body post-mortem (Foucault, Birth of the clinic: an archaeology of medical perception, 1973, p. 10) is comparable to Farmer’s insight on
the need to move beyond a “living” ethnography despite their differing views on the role and utility of illness being informed by a largely biomedical model. Farmer calls on the use of the ethnographic findings of those who are “dead, or near-dead” (Farmer, 2004, p. 307), as opposed to solely those who are living, to better understand the “complicity necessary to erase history” (Farmer, 2004, p. 207), whereas Foucault uses the body post-mortem, and his use of the medical gaze to legitimize the utility of a passive patient paradigm for understanding illness. Both takes on the human body demonstrate the breadth of medical anthropology, and the progression towards understanding the role of culture and ethnography to the discipline, with specific attention paid to actors and their relative power given their title and specific circumstance.

The nexus of power and symbolism of the physical human body as discussed by Foucault has inspired two different definitions of “biological citizenship”, both relevant in the field of medical anthropology. Petryna’s definition of biological citizenship emerges from her exploration of the experiences of those in the Ukraine who have endured physical, emotional, and mental hardship because of the Chernobyl nuclear reactor explosion in the 1986, and her evaluation of how their new collective identity helped activate both formal and informal modes of social, political, and economic transformation (Roses-Periago, 2008). Therefore, “the very idea of citizenship is charged with the superadded burden of survival” (Petryna, 2003, p. 218). In 2005, Rose and Novas developed a definition of biological citizenship wherein a citizen’s relationship with their own biological bodies is re-articulated through socio-cultural practices. These practices politicize group-based concerns about biomedical issues and contribute to the political issues that have come up in the field of health and illness in recent decades (Cuevas Valenzuela & Th. Mayrhofer, 2013, p. 312). Ultimately, what is understood among authors is that biological citizenship refers to an emerging political identity, that re-articulates citizens’
relationships to their own biological bodies through socio-cultural practices that politicize group-based concerns about biomedical issues ( Cuevas Valenzuela & Th. Mayrhofer, 2013, p. 312). The term and ideas that define one as a biological citizen attempts to subvert the passive narrative and symbolism of the patient as the sole receiver of applied knowledge and the object of medical intervention. Instead, the biological citizen is an active agent in their own “self-promotion, and is the creator (or co-creator) of forms of knowledge, who advocates for his or her own health status” ( Cuevas Valenzuela & Th. Mayrhofer, 2013, p. 313). Del Casino Jr. (2010) provides insight to how illness defines the places and spaces that the diseased body navigates through suggesting that “those who experience illness negotiate not only the ebb and flow of changes to their bodies over time, but also their changing relationship to their everyday life spaces, such as the home, the clinic and the neighborhood” (Del Casino Jr., 2010, p. 190). The identities of a passive patient via a clinical gaze and a more active biological citizen are not mutually exclusive.

Petryna (2003) elaborates on this in her discussion of “sufferers” navigating through places and spaces forever transformed by Chernobyl nuclear reactor meltdown. In the city of Korosten, characterized by at least twice the accepted normal levels of background ration, “sufferers” or “ poterpili” travel with their “dosimetric passports” containing information about the dose of radiation they have been exposed to, as part of a statewide dosimetric registry system thereby certifying the individual’s identity as a sufferer. Once the level of radiation their body has been exposed to exceeds the maximum allowable level, they are eligible to move to free government housing in areas that are deemed 'ecologically clean'. Most people end up choosing to stay in Korosten, where they have access to free public transportation, medical assistance, and cheaper rent. Under the current welfare system and government legislation, there is an
inadvertent creation of a population of sufferers that transcend class, education, and employment categories. This type of welfare system has incentivized a 'suffering' body in a political-economical respect, making policy amendments tricky in attempts to address persons who try to exploit or appropriate their suffering state. We see here a reemergence of ideas relating to the allocation of blame- as many of those who chose to remain in contaminated zones are chastised for disobeying government attempts to ensure safety. In one case, a civil servant, Volodymyr Shatylo working for the Ministry of Chernobyl had a statement published in a popular Zhytomyr newspaper with the following message to those who chose to stay in these areas:

“The state has taken on the responsibility of given families the opportunity to live and breathe in an ecologically clean area…people are deciding their fates injudiciously…what explains this behavior? Ignorance or simple disregard of the deadly menace of the Chernobyl monster that breathes, carrying death for all who are alive? Good people, come to your senses, spare yourselves, or at least spare your children.” (Petryna, 2003, p. 86).

This is combatted by ideas of biological citizens acting in ways to ensure their own safety outside of the often-one-dimensional argument highly influenced by a biomedical model that leaving a contaminated zone will be better for them health-wise, and thus, they should leave as soon as possible. On the contrary, biological citizens in these contaminated zones mobilize to ensure economic, political, and geographical safety by choosing to live and navigate through spaces where their collective identity assures them a standard of living. In addition, staying within the zones also means that their identities as sufferers will not waver, and thus impact their ability to be competent members of a capitalist society.

Turner, elaborating on phenomena related to identities and illness, comments on this by his insight on how “health becomes a commodity” therefore there is a “permanent tension between the requirements of the economy and the requirements of a healthy existence” (Turner,
From Foucault to Turner, it is seen through medical and political-economical models that illness can be regarded as a form of social deviance, again, playing into narratives of deservingness, especially when it comes to government-financed provisions relating to healthcare, food, and shelter.

Forces of depersonalization are described as present when discussing illness in the context of biological citizenship, where a “picture of a known, circumscribed, and manageable biological reality” (Petryna, 2003, p. 216) is crafted for institutions to better compartmentalize realities of suffering. The naturalization of diabetes makes it seem like a matter of what Petryna would call “social health” (Petryna, 2003, p. 216) rather than one tied to structural violence, poor medical policy, and overall unfairness in the treatment of some populations among others. Again, as mentioned in the case presented by Marr, Manitowabi, Gzik, McGregor and Corbiere (2011) a culture of blaming the individual (individualizing) pervades common interventions especially with regards to type 2 diabetes. Broom and Whittaker discuss the language of diabetes management as being laden with terms related to control, surveillance, discipline, and responsibility, for example, control of blood sugar levels and control of food consumption, among other things (Broom & Whittaker, 2004, p. 2371). In this, an inability to adhere to ideas of control, surveillance, discipline, and responsibility construct an identity of the sufferer that is irresponsible, and who is to be blamed for their current state of health (Broom & Whittaker, 2004, p. 2373). This idea of blame, brought on by behaviour related to a medical, and thus, biological conditions further grounds biological citizenship as a framework I attempt to answer questions related to conceptions of type 2 diabetes, and what type 2 diabetes treatment looks like

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16 Throughout the results and conclusion sections of my thesis I will explore suggestions made by participants about what meaningful type 2 diabetes interventions look like, as well as discuss the current state of type 2 diabetes treatment and prevention methods.
it South Trinidad. When those with type 2 diabetes speak of “control” Broom and Whittaker suggest that they are employing two discourses; one being the language of biomedicine and the other to assert a “positive identity and agency in the management of their disease” (Broom & Whittaker, 2004, p. 2381). “Control” in this case, is a highly desired ability related to power dynamics between not only the individual and their health, but also the individual and their ability to navigate through public spaces that frame their type 2 diabetes as a medical reality due to their inability to subscribe to healthful norms, take care of their own bodies, and therefore operate as normal, healthy members of society. Ideas of depersonalization are still relevant here, as in, the main facet of these judgements made with regards to those with type 2 diabetes are almost exclusively tied to their illness and ability to manage (or not manage) their illness. Their identity is formed almost exclusively through a biomedical model of diabetes management and control, and therefore, is lacking in the more complex ideas of how illness and culture intersect, and thereby create definitions and understandings of illness and healing.

Oppression and Empowerment Models

Elaborating on a critique of Foucault’s clinical gaze is the study of Oppression and Empowerment Models in clinical practice. Thesen identifies the tendency for patients to feel dehumanized and “othered”, with an Oppression Model is “most relevant when meeting “low-status” patients from vulnerable and marginalized groups who regularly experience oppression” (Thesen, 2005, p. 52).
Conversely, an Empowerment Model values acknowledgement over objectification, looking at nuances of uniquely personal experiences (and thus, respecting the experiences of “the other”).

The next steps, “diversity” and “positive regard” lead to a better understanding by the doctor to focus on resources and identify strengths. Therefore, in its application to diabetes treatment and prevention, it is imperative that doctors recognize not only the biases that they may have when it comes to suggesting dietary changes and new medicine use, but also the fact that their patients are coming into a space where they may not feel comfortable, believed, or adequately educated and helped when it comes to diabetes management and prevention. Discussing and understanding resources for treatment and thus respecting the experiences of “the other” mean that there is an openness, understanding, and respect of the utility of food and folk medical treatments either in conjunction, or, as opposed to contemporary medical treatments. While Broom and Whittaker (2004) do not explicitly mention the Oppression/Empowerment models, it can be inferred that the dominant biomedical language that they critique falls under the Objectifying Model shown above.

Laying the groundwork for understanding Delocalization and Food Systems

Pelto and Pelto (1983) describe delocalization as the “process in which food varieties, production methods, and consumption patterns are disseminated throughout the world network of socio-economic and political interdependency” (507). The use of food as a diabetes treatment method also means that there is delocalization in the Trinidadian medical model that informs illness treatment. While using a North American medical model to inform treatment measures in
areas of development is not new, the term “delocalization” takes on a more complex meaning while being understood and critiqued in terms of understanding type 2 diabetes treatment. Pelto and Pelto (1983, p. 508) note that there has “been little empirical investigation of the relationships among social change, dietary change, and nutritional status and health” when it comes to food availability and dietary patterns. Considering my findings, I complement Pelto and Pelto’s insights on delocalization with the term “relocalization”, a term popularized in agri-food studies. Relocalization is understood as a “strategy to build societies based on the local production of food, energy, and goods, and the local development of currency, governance, and culture” (Post Carbon Institute, 2014). I draw on ideas of delocalization and relocalization when evaluating how those with diabetes rearticulate their relationship with their body, and thus, what they consume, as well as how they develop ideas of health, and how the construction of a healthy diet is inspired despite inaccessible ideas of health advocated by contemporary medicine and education.

If attention is not paid to the social climate that leads to dietary and nutritional change, then an approach related to the Oppression Model emerges, as the passive patient and the dynamics of their experiences and culture are ignored when it comes to medical treatment and understanding. Following an Empowerment Model of patient/doctor interaction means that in evaluating the resources one must help overcome any medical issues they are facing, there is a clear appeal by medical professionals to better understand, or at least, entertain the ideas supported by Pelto and Pelto (1983). While this does not simplify this seemingly wicked problem (The PLOS Medicine Editors, 2013), it does address a clear power dynamic between patients and doctors (medical professionals), and at the very least, addresses the monopoly these persons and institutions have in defining health and allocating blame for poor health.
What resiliency and social transformation looks like in South Trinidad is highly nuanced due to the re-localization of dietary habits, and re-adoption of folk-medical treatments as a means of managing and controlling instances of type 2 diabetes. Relocalization, in this case, is a reclamation over what health means, looks like, and even tastes like. These ideas are influenced based on historical and folk ideas of health and healthcare, but also, are created in opposition to a hegemonic healthcare system that systemically devalues certain bodies over others, whether intentional or not. I argue that a failure in planning leads to an inability to access standardized medical assistance, therefore, the already apparent power imbalances between patient/doctors and medical institutions are exacerbated, thus, the value of relocalized diets and historical conceptions of health and diet are even more important, as they can be understood by diabetics as the most accessible, safest, and a time-tested way that people might have to help them manage instances of type 2 diabetes.

Intersections of nutrition, culture, and consumption – looking at the role of Nutritional Anthropology in contextualizing type 2 diabetes management and treatment

Folk Ideas of Food and Health

A major aspect of dietary change related to modernization, development, progress, and acculturation is delocalization. Delocalization has two main definitions in terms of its relevance to nutritional anthropology. Its first definition is derived from the result of the reduction of local autonomy of energy resources due to newfound dependences on “gasoline-driven equipment for transportation, local industry, and other essential processes” (Pelto & Pelto, 1983, p. 510). Its second definition looks at the increased sensitivity that dietary patterns have to political fluctuations in any sector that can be influenced, or affected by energy and food networks (Post Carbon Institute, 2014). An example of this would be changes in the North American Free Trade
Agreement, and its ramifications for the foods available in North America, as well as their price and available quantity.

Paying attention to delocalization is important in an analysis of current food systems, which include activities involving processing, transport, and the consumption of food. If the definition of a sustainable food system means achieving social, economic, and environmental goals that are defined by a segment of society, then sustainability and sustainable food systems is, and should be recognized as a social movement. As such, diabetes as a social issue, and illness is a relatively unexplored facet of food systems, especially in areas, communities, and countries that use food as a means of managing and controlling illness (in addition to their consumption, and lack thereof as a means of ailment).

A rather unexplored facet of delocalization, however, is what the re-adoption of traditional foods and, for the sake of this thesis and research, what medicine, looks like. “Re-localization”, the term I use to better situate the reality of reconciling past and current eating patterns in lieu of change due to a diagnosis of diabetes, is something that is relatively nuanced given the unique political, social, and economic climate of South Trinidad. While it is not my intention to imply that delocalization has negatively changed the past and current food systems of South Trinidad, an objective of this thesis is to explore how a more localized food system is representative of a safer, more accepting environment wherein those with type 2 diabetes can navigate through dietary change, and the barriers that those sometimes face to supplement their diet in localized, health-conscious ways.
Diabetes in the Caribbean Context

While there is an array of literature on type 2 diabetes in the Caribbean, most function as quantitative analyses of disease and population. The utility of these articles, reports, and publications are not lost in this thesis, however, I identify and critique the stratification of Trinidad in attempts to understand food and food consumption as a means of managing and controlling instances of type 2 diabetes, as there are rarely discussions about how politically, economically, and geographically stratified areas present their own sets of challenges in conceptualizing how one navigates through spaces and places with identities now informed by illness.

Ethnicity has been used as an indicator of how susceptible one is to certain ailments, in particular, those cardiovascular in nature. Given the ethnic diversity in the Caribbean, research into ethnicity and other predictive characteristics is a necessary part in understanding the culture of illness and disease. This is especially important in a study of type 2 diabetes, wherein cultural understandings and conceptions of the disease frame what treatment and prevention measures look like. Among ethnicity, it is noted that age family history, waist circumference and hypertension are significant risk factors for type 2 diabetes, often being a better indicator than body-mass index (Shivananda, et al., 2014, p. 94). Those who were in high-risk groups of type 2 diabetes diagnosis fit into a profile citing a family history of type 2 diabetes, Indo-Trinidadian ethnicity, abdominal obesity, and an elderly age (Shivananda, et al., 2014, p. 94). Missing from these factors, and reflective of more environmental contexts, is the economic
In a 2004 study, statistics were compiled from aggregate reports on the prevalence of diabetes specific to 39\textsuperscript{17} countries, one of which was Trinidad and Tobago. The sample size, made up of 2,315 participants all aged between 35 to 64 years of age, was estimated to represent a total of 13 other Caribbean countries\textsuperscript{18}. As such, projections for those being diagnosed with diabetes (both types 1 and 2) were 13,307 for 2000 and 32,959 for 2003, with a percentage of change in the number of people with diabetes being 148\% within the 30 year time period (Wild, Sicree, Roglic, King, & Green, 2004, p. 1048). This is compared to global statistics, wherein an average of 171,228 persons was forecasted to have diabetes in 2000 and 366,212 being diagnosed by 2030. An average increase of 114\% means that Trinidad and Tobago, as well as its Caribbean counterparts are estimated to experience an increase of diabetes diagnoses higher than the global average. While this is representative of urbanization (Wild, Sicree, Roglic, King, & Green, 2004, p. 1049) making healthcare facilities more accessible, it is also noted that an aging population will see to that these numbers rise (Shivananda, et al., 2014, p. 94).

From a nutritional and medical standpoint, there is significantly more information that breaks down what ideal diets look like in a Caribbean context, and that is available in medical clinics, online, and sometimes in television news segments. However, varying language makes it difficult to disseminate information, and translate it from an academic voice to one that is more

\textsuperscript{17} These countries were Australia, Bolivia, Brazil, Cameroon, China, Colombia, Fiji, China, India, Iran, Israel, Japan, Jordan, Lebanon, Malta, Mauritius, Mongolia, Nauru, Netherlands, Oman, Pakistan (rural and urban averages were counted separately), Paraguay, Poland, Russia, Samoa, Saudi Arabia, Singapore, South Africa, South Korea/Republic of Korea, Spain, Sudan, Tanzania, Trinidad, Tunisia, Turkey, the United Arab Emirates, the United States of America, Uzbekistan, and Vietnam (Wild, Sicree, Roglic, King, & Green, 2004, p. 1048).

\textsuperscript{18} The statistics collected for Trinidad represented numbers compiled for Antigua and Barbuda, Bahamas, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines (Wild, Sicree, Roglic, King, & Green, 2004, p. 1048)
easily discernable for general audiences looking for guidance pertaining to a healthy dietary transition. For example, in a report published by the Food and Agriculture Organization (FAO) of the United Nations (2007), foods were divided into the categories of cereals, starchy roots, sweeteners, pulses/nuts/oil crops, fruits and vegetables, vegetable oils, animal fats, meat and offals, fish and seafood, milk and eggs, and “other.” While understood means of classifying foods, these groupings are not contemporary, popular means of thinking, or categorizing foods. Instead, most literature on diets discusses the general grouping of carbs, fats, and sugars, dietary fiber, salt, and protein (Vaughan, 2005, pp. 56-64). In my interviews, when I asked about “pulses”, “oil crops” and “offals” specifically, participants did not know that they were, or what foods they ate would fit into those categories.

Ultimately, the context of diabetes in South Trinidad that I explore in this thesis is contingent on the explanatory framework that frames this study, as well as its specific geographical focus (micro view of South Trinidad/Thick Village, as opposed to a macro view of all of Trinidad and Tobago). Meant to supplement the quantitative-leaning research that makes up the body of work focused on type 2 diabetes in the Caribbean, this more in-depth and nuanced account of diabetes and its non-scientific understandings means that there is an opportunity to better unpack instances of unexplored ethnic stratification and ideas relating to health care more in-line with the transdisciplinary field that is medical and cultural anthropology.
Chapter 4 – Constructing the “Diseased” Identity – The Social Construction of Type 2 Diabetes Unique to South Trinidad

“Remember, this is a lifestyle disease” – Tahnee

In this chapter, I evaluate how participants discuss the ways they have undergone a change to their cultural, biological, and medical identities, ultimately forming a new “diseased” identity. To reconcile this “diseased” identity within a Trinidadian society that favors certain bodies over others, I argue that those with type 2 diabetes in South Trinidad mobilize as biological citizens, and reclaim ideas of health, education, healthcare, diet, and treatment. I choose to focus on the cultural, biological, and medical factors that go into the social construction of the “diseased” identity, as they are reflective of the interests of those who hold social and political power that then lead to increased instances of inequality, signified through changes in the human body (and thus, biological citizenship). This chapter will answer questions related to what diabetes treatment looks like in South Trinidad, and what social transformation and mobilization look like in attempts to manage and control instances of type 2 diabetes.

Culture is in the context within which one lives, therefore for there to be a meaningful look at the complexities of living with diabetes, the social and biological presumptions of it must be evaluated. I draw on ideas presented in my literature review on biological citizenship, structural violence, and the medical gaze. I then go on to discuss how this change to a now classified diseased body, reorients conceptions of health and healthcare, often influenced by North American conceptions of disease and recovery, thus the medical identity. This dissonance between achieving a North American prescribed norm of recovery agitates ideas of competency, and therefore, a willingness to follow-through with treatment methods, or even to look towards contemporary medicine as a welcome resource (Thesen, 2005, p. 49). To overcome this, as a resiliency measure, we see the adoption of food memories and folk ideas about food and
medicine to craft culturally relevant and meaningful ideas of what a healthy diet looks, tastes, and feels like. Conversely, we also see instances wherein participants question their deservingness of health, and thus, their deservingness of food. This will be explored in more detail in Chapter 5, where a lens of nutritional and cultural anthropology is used to explore my fieldwork findings.

The cultural identity

*Rosa was one of my first interviews when I began my fieldwork. As my grandfather’s neighbor, she’s known me since birth, and was willing to sit down for an interview on the condition that I visit her in her apartment, and take my time with questioning. Given our history, she was open, comfortable, and relaxed with the interview. “Most of the Indians in my family they have diabetes. Right. But the negro part, they scarcely have. I have more family in like, Fyzabad there, and everybody is diabetic.” During our interview, she ate a lunch of boiled fig, brown rice with peas, and greens.*

Over the last two decades, epidemiological research has emphasized the influence of sociocultural determinants upon health and health behavior (Bhattacharya, 2012, p. 162). Self-efficacy in disease research is found not to be solely individualistic, but also, deeply influenced by social processes and interactions with the community. As such, the real-life experiences of people with type 2 diabetes will be explored, with specific attention paid to their sociocultural contexts. Before continuing, I should note that community and culture are not static, and there is a considerable diversity within the group that I chose to focus my research on including age, food preferences, and connectedness to the South Trinidad community.

Except for my participants who were younger in age (younger than 30 years old) those diagnosed with diabetes were not surprised about their diagnosis. Collectivizing terms were used to describe families with histories of diabetes such as “we”, “all of us”, or circling hand gestures meaning “all”. As Rosa noted in the quote above, her Indian family (most living in South
Trinidad) had, or currently have diabetes, making her diabetes hereditary, rationalizing her diagnosis as something to be expected. For many in Thick Village, type 2 diabetes was a means to an end, as in, there was an understanding that “if god spare life\(^\text{19}\)”, their death would be because of complications from type 2 diabetes, and one’s deteriorating health would be a sign to get their house in order, and prepare for last rites. Maggie, a former cashier, considered customers and her interactions with them as opportunities to learn more and share advice about coping with diabetes.

\[\text{I met a lot of diabetic people and I would watch you, and tell, tell you or tell, and I'm saying “that person is diabetic”, but I don’t know, but I don’t know how I does know that, but I will look at you, and I'll say I feel she’s diabetic or he’s diabetic. So, in the supermarket now, they used to come, customers, and I like to chat with people so I, when they come and they buy, they used to buy their health stuff, their bran, they buying their Equal...their Glucerna\(^\text{20}\)...yeah, they used to buy a lot of Splenda\(^\text{21}\) drink.... and I would talk to them and when I would tell them what I know good. You understand? I know about it not because doctors telling me to use this and that, and don’t use too much of starch and provision, but in it too, but provision is better to eat than rice.}”

Tait Neufeld discusses the symbolism of food and the trust that exists between the individual and the larger communities of Métis women in Winnipeg, Canada (Neufeld, 2011, p. 489), which rings true as well in South Trinidad, and spaces wherein people from across Trinidad had the opportunity to converge and connect. At the 25th Annual Diabetes Symposium, hosted by the University of the West Indies, St. Augustine Campus, this idea of unity and collective identity came full-force, with different regions sporting color-coded t-shirts with the

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\(^{19}\) “If God spare life” is a common saying meaning “God willing”, “God permitting” or, “with God’s blessing”, often said after one shares insights about the future.

\(^{20}\) Meal replacement drink, sweetened with a no-calorie sweetener.

\(^{21}\) “Splenda” is a no-calorie sweetener brand. The term “Splenda drink” in the noted context meant any low/no calorie drink, not a drink that specifically had the “Splenda” sweetener in it as an ingredient, but one that was reduced/no calorie.
region they were representing. I travelled to the conference with the Siparia region club, and saw first-hand the sense of camaraderie and group-care that was shown for one another. Given that this regional club met in churches, and other publicly accessible religious spaces, there was a heightened sense of respect, responsibility, and care.\(^2\) As such, there was also a nature of understanding and patience; there was a culture of non-blame with how diabetes was discussed between members of the Siparia club. This contrasted greatly from more rigid, medical spaces such as clinics and hospitals, where these diseased, or ‘deviant’ bodies were constructed as burdens, often there because of a disease representative of gluttony and poor hereditary health. The garnering and coming together of communities in spaces where diabetes is discussed in culturally-relevant ways helps those diagnosed evade a medical gaze that highly scrutinizes the individual’s actions and bodies for deviating from healthful norms.

Given an aging demographic of South Trinidad, there was a sense of indoctrination to an “older” generation after a type 2 diabetes diagnosis. This was met with a quiet comfort of knowing that this diagnosis came because of familial history and an increase in social standing/income, as per an increase in food consumption (and specifically, an increase in sugar and calorie consumption). Culturally in South Trinidad, diabetes was not something that was “frowned upon” or seen as a burden, despite being rightfully understood as problematic and in need of fixing, or at the very least managing in the sense of testing blood sugar levels, or taking medication. For several my older participants, it meant finally recognizing the need to draw back

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\(^2\) While near, or inside the church, it was expected that attendees wear appropriate clothing (covered arms and legs), and refrain from speaking loudly. While in, or near the church, it was expected that you should not have any “bad thoughts”, and instead, resolve any bad or inappropriate feelings before coming into the church.
on work commitments and thus, reallocate that time to making themselves better. From my interviews, this act of “taking care” looked like:\textsuperscript{23}

- Drinking water more frequently
- Not getting overheated (this often meant spending more time outside when it was cool/breezy, or, spending more time inside when it was very hot)
- Travelling with food/medication
- Not skipping meals (having money to buy food if need be, or, always having a breakfast/lunch/dinner available and made\textsuperscript{24})

While these practices and behaviors are not new, there is a more valiant effort to keep them habitual and consistent. There is a better sense of engagement between culture and biology here, as drinking water, managing a comfortable body temperature, and eating and/or taking medication more regularly has effects on the body’s biology, and thus, my second part, a new biological identity.

The biological identity

They would ask, “are you taking your medication?” and I would say “…no.”

The newfound biological identity participants shared was inspired by a medical gaze, characterized by a passive patient and active, authoritative medical institution. While the cultural identity discussed previously showed a dynamic community, and thus, active patient, the opposite can be said of the biological identity observed. Instead, institutions, specified as doctors, medical programs (infomercials on television), information booklets, food packaging and medication, outlined behaviors that those with type 2 diabetes were to adopt to either achieve

\textsuperscript{23} List comprised of information drawn from participant interviews/pile-sorting activity.

\textsuperscript{24} This also meant participants would more often travel with foods, favouring packaged snack foods such as chocolates, chips, or muffins/cookie packages
a more acceptable medical norm, or, take them to a biological state resembling their levels of
health prior to being diagnosed with diabetes. This in an important distinction to make,
especially when evaluating the role of food and food memories in conceptualizing, and
reorienting ideas of health through relocalization that will be explored in Chapter 5.

All interviewees noted that they were prescribed Metformin\textsuperscript{25} to control blood-sugar
levels. Typically, the medication is to be ingested daily, and works optimally with a healthy,
balanced diet and regular exercise. Although it was a touchy subject for some, as to admitting
some level of deteriorating health, some participants shared with me instances of medication-
sharing.\textsuperscript{26} Aminata shared her Metformin with her husband, who is not diabetic, taking half-
tablets instead of full ones. When I inquired further, she said that he would take tablets as a
precautionary measure whenever he had a particularly large meal, heavy in fat, carbs, and sugar.
Aminata specifically mentioned the Eid celebration as an instance where her husband would take
part of her medication. With a vast spread of local favorites and sweets, sweet drinks, and boxes
of chocolate usually exchanged as host gifts, the entirety of the celebration was a “what not to
do” checklist crafted by institutional professionals. While I am not doubting the medical
community’s ability to see and appreciate special occasions as a time of indulgence, it is
interesting to note that Metformin was used as a preventative measured by someone with a non-
diseased, or “healthy” body at the eventual expense of the diseased body (those who owned the
medication).

\textsuperscript{25} A commonly prescribed oral type 2 diabetes medication that helps control blood sugar levels.
\textsuperscript{26} Given the subject matter of my fieldwork, I was offered Metformin by interview
participants/others who thought I had type 2 diabetes, and suggested I use it after meals. This
experience speaks a bit to the casual nature of medication sharing.
Nancy was the only person I interviewed who worked in the field of healthcare as a nurse. She admitted that her diet post-diagnosis was less influenced by local staples and favorites and instead by foods that she sees are associated more with “healthy” diets.

Provision, carbohydrates, I did cut off. Lots of flour stuff, pasta, roti, we will have maybe one dish flour, maybe one dish whole wheat bread, whole wheat rye. Roti, no. Only as necessary. Our tradition here is have sada with a veg....hardly...More intake of whole wheat and rye...we do toast in this house.

Unsurprisingly, Nancy’s take on what healthy food looks like was one of the two polarizations I found in interview participants. Two groups emerged: those who were ready and willing to adopt new foods, more commonly eaten in North America, and thus, reflective of North American healthy eating standards, and those who chose to reject these suggestions, and reorient their ideas of health reflective of food and food memories, inspired by past times wherein they were deemed and felt healthy. The empathy and nostalgia that underlie one’s cultural identity meant better, and more comfortable mobilization among private, household and community spaces. Conversely, one’s biological identity was inspired by how comfortable they felt within medical spaces. As previously mentioned, with a higher concentration of medical clinics and hospitals located in the island’s North, medical spaces for people in Thick Village were often unfamiliar and inaccessible, representing a schedule of stress and emergency whenever there was a need to go to one. Nancy, as someone who was able to better navigate through a medical space, therefore, was more critical and had a more matter-of-fact rationalization of her current, past, healthy, and unhealthy eating habits.

“I just work with my regular physician, I do my hospital check-up, because as I said I work at the hospital, so I work do the routine bloods, every 2 months I will go to the doctor to see if I feel well, if I feel okay. Basically, it’s okay from the medical point of view”.
Salisha was another participant who regularly navigated through medical spaces, as her job (undisclosed) required her to travel a lot. She was, and remains active in the South Trinidad political scene, as a strong supporter of the United National Congress (UNC). In addition to interviewing Salisha, I also travelled with her to the UWI St. Augustine campus for the Diabetes Symposium. During our time travelling and chatting, she talked to me a bit more about her recent weight-loss, and her commitment to healthy eating. She discussed not eating any fast foods, and, how she no longer ate any curried or stewed chicken, goat, duck, or other meats popular in the area. Her take on these patterns of consumption was not tied to any kind of historical sense of “new” fast foods or “old” cook-up foods, but instead, that when given the opportunity to eat said foods, the tendency to overeat is overwhelming, and therefore, for her, eliminating them altogether meant that there was less of an opportunity for such a high caloric intake. To better explain, and justify her stance, Salisha mentioned how she was able to quickly eat smaller portions, and that her constant traveling, especially around commercial areas/where malls and other shops were accessible meant she was able to more quickly get some fruit, or nuts, or healthier packaged foods that limited her serving sizes to just one (example, single-serve packets of almonds). The way in which she specially talked about her diet, and her “new” body was interesting in that words like “control” and “flatten”, “smooth” and “cut” were used. She also gauged her success in adhering to a healthier lifestyle by only needing ½ a metformin tablet twice daily, instead of two whole tablets.

The medical identity

Bradley was one of the only men I interviewed during my time in Trinidad. He was playing cards with friends on the Sunday I visited him in the front yard of his house. “I was coward first, but then I checked…then I started taking the tablets, and now I take the insulin.” Bradley was enjoying some snacking peanuts and a STAG beer before the interview, his last meal for this Sunday before taking an early night and getting ready for a busy Monday.
The geographic divide of South Trinidad plays a role in how medical institutions and their accessibility are barriers to those in South Trinidad. Knowledge transmission and translation take on a political tone, as there is disparity between bodies who can access treatment and those who cannot. The construction of a new medical identity is highly impacted and reflective of the Southern Trinidad experience. This comes to an impasse when treatment methods are influenced and standardized by a North American medical model. Therefore, when I refer to the “medical” identity, I am specifically speaking of the relationship one has with the formal and traditional means of medicine, and how these two knowledge pathways are reconciled as per the individual and community.

The representation of diabetes as a self-induced “lifestyle” condition, and as a disease of excess due to overindulgence is reinforced by health promotion, that tends to emphasize that one should avoid diabetes through a “sensible” diet and exercise (Broom & Whittaker, 2004, p. 2373). It is therefore understandable why participants were always wary of special occasions with their communal settings and large spreads of foods, and when the tendency to is overeat, and possibly be overindulgent. Here, we can see the medical identity as a “sufferer” (Petryna, 2003, p. 85) in a more public, social sphere. By merit of already deviating from a social, and medical norm, those with type 2 diabetes are all-knowing of the potential commentary that may preclude them, especially in public spaces. We can see such spaces satisfy the Empowerment track criteria, despite not being a traditional medical space. It was noted by all interview participants that they learned more about managing their type 2 diabetes, food, and exercises from friends, and always had the opportunity to connect at such events. Understanding this, if we then think about these as an informal forum where those with type 2 diabetes can comfortably navigate through a space where they can share their knowledges, we can apply Thesen’s (2005)
oppression and empowerment models and compare these gatherings with doctor’s offices/other more contemporary places known to provide medical information and support. Given an inability for many to readily access clinics, and a general dislike that was apparent from interview participants of traveling to doctors, taking medication, or using their physicians as a first-line of contact when it came to questions about type 2 diabetes, as well as medical conceptions of type 2 diabetes, framed as a disease of excess and overindulgence, it is easy to see how an oppression model, based in objectification, frames how patients feel in said healthcare settings. Conversely, the already homogenous cultural environment of these social gatherings endorses an idea of acknowledgement about medical struggles. There is already a better sense of what resources are available and comfortable to those who live in the area and are in attendance to these specific events. Positive regard is shared not only because of the camaraderie, but because these celebrations are joyous in feel. While it might sound like a stretch, understanding the social dynamic of these informal sites of information sharing can provide insight towards what a comfortable educational and learning experience should look like. Also, it gives a better sense of how the medical identity transgresses the public and private sphere especially when it comes to knowledge accumulation.

The rest of this chapter will look at factors beyond the diseased identity and diseased body but still related to the “citizenship” aspect of being a biological citizen. These factors play a role in framing circumstances where biological citizens further find solace in their reoriented communities, and therefore, can better contextualize why treatment measures suggested by medical professionals satisfy criteria for an Oppression Model, failing to consider the resources available to those in South Trinidad, as well as relying on stereotypes relating to an unfavorable,
inactive diabetes sufferer further exacerbated through a medical gaze, advocating a passive patient and active healthcare practitioner.

Beyond Food and Medicine – other factors of the diseased identity

The previous section focused on ideas and frameworks representative of a medical anthropological lens, and components inherent in constructing ideas of what biological citizens look, and mobilize like. I now turn to an examination of the external factors that identify power imbalances and historical precedents that add to the normalization of problematic institutions that lead to the persistence of diabetes within bodies of those in South Trinidad that fall just beyond the scope of cultural, biological, and medical identities. These factors will be discussed within this portion of the chapter, and again in more detail and specific to food, food consumption and accessibility in Chapter 5.

Ethnic and Racial Stratification

As alluded to previously, there is a strong colonial influence in how the conception of institutions systemically exclude, and problematize certain diseased bodies, and unfairly and inadequately label them as more or less deserving of treatment, access, and overall health. A more unique facet of understanding diabetes in a Trinidadian context is how the island is ethnically and racially stratified, and how, at times, this stratification is “played up” in the case of government elections or “played down” in cases exploring the rich history and food culture of Trinidad. These discourses have reinforced competing politicized racial identities that are deeply shaped by a dichotomous understanding, if one party wins, the "race" wins, and, therefore, the other "race" loses (Abraham, 2014, p. 118). Interestingly, we can draw parallels between this and the dichotomized ideas of health presented. The first idea of health crafted by a medical model, representative of new medicine relative to the thoughts of my participants. The second idea,
influenced by a cultural model, informed by food, food histories and relocalizing not only food systems but healthcare systems and understandings.

In keeping with the racially stratified discourse, we can understand where the more blanketed generalization where we see more of first idea of health and treatment adopted by those in North Trinidad. There is admittedly better access to clinics, professional advice, and hospitals, ergo, more Trinidadians of African heritage being able to access said resources. As such, those in South Trinidad, who have less access to institutions of healthcare “lose” the race (Abraham, 2014, p. 118), therefore, vis-a-vis the social construction of disease, we see institutions of power at work valuing and catering to certain bodies over others. I do not argue that there is a favouring of specific bodies over another (that in, black bodies over brown bodies), but instead, that there is a preference for bodies that are in more affluent areas versus less developed areas (as per infrastructure) that is reflective of how ethnic and racial stratification has happened on the island. If someone can more easily access a doctor, can purchase prescription medication, can afford to follow new dietary plans, and can connect with professionals for check-ups, they are, in terms of a biomedical model of disease treatment, an ideal patient doing whatever they can do, within their relative power, to adhere to guidelines suggested and tested to make them better, and thus, transform from a diseased identity to a healthy one. The opportunity to do this, as in, be that “ideal” patient as per a biomedical model, is less likely in Siparia, therefore, the diseased identity takes on a more loaded term not only in an inability to carry out “healthy” habits. In relation to citizenship, we see how “individual behavior change is determined to a large extent by social environmental contexts such as community norms, cultural practices, and discrimination issues” (Bhattacharya, 2012, p. 163) therefore, we can better situate that the historic stratification of resources has crafted an culture wherein the typical response to
type 2 diabetes control and management is not reflective of advice from medical professionals, but from resources that are more readily available, and accessible within South Trinidad.

**Crime in South Trinidad**

Crime in South Trinidad has made mobility throughout the area unsafe for children and women. It was not uncommon that during interviews, the sounds of speeding cars racing through wider village streets would interrupt conversations. These instances, in addition to an increase in the number of house robberies and gun violence, made traveling from the private to public spheres more difficult for my female interviewees. “It’s not like before, we just can’t walk anywhere.” “Before” was often made about the interviewee's youths, when no only there was less access to cars and taxis, but also when there was little to no crime in the public sphere. It is important here to mention the differences between the public and private, since the “before” or, past, was representative of a time wherein the private sphere was a more well-known place of violence, aggression (spousal abuse, elder abuse), and poverty, that my interviewees would sometimes touch on. With an increase in income, and thus, financial stability, women had the agency to leave and return to their households more frequently, and finance themselves, garnering a level of independence otherwise rare in generations past.

Participants prioritized their safety indoors over exercise outdoors. This was generally rationalized by who benefitted from the communal need to feel safe versus the individual benefit of exercise. Participants who had exercise equipment stored them outdoors, usually in their galleries, or, at the front of their houses (where gates still meant that they were not accessible to just anyone). Otherwise, the best tool for weight management was dietary change; eating smaller meals, eating less frequently, and not eating past certain times in the evening (most popularly, 7:00 PM).
“Being a diabetic, you have to go through a lot...every time that you eat something even a little more than you eat, sugar and pressure going up, like on Sunday, I drink coffee, which you're not supposed to do...but you now, sometimes.”

Concluding Thoughts

Throughout this chapter, I have evaluated how the emergence of new identities because of a biological change, means that those in South Trinidad activate, and mobilize as biological citizens. Understanding this group of people as biological citizens, and not simply as individuals with diabetes, helps craft a better understanding of the historical and social circumstances surrounding a biological phenomenon. To cope with an inability to feel supported, or safe within staunch, biomedical communities, those with type 2 diabetes use their “diseased” identity as a “sufferer” to transgress public and private spheres, opening the possibility of where learning and medical knowledge can be accumulated. A specific example I presented was the importance of large community gatherings, where those with type 2 were put in uncomfortable positions of eating in front of others, thus, playing into stereotypes of type 2 diabetes as “greedy” and “irresponsible” (Setälä & VäLiverronen, 2014), but still in a more sympathetic setting where “citizenship” into this community of those with type 2 diabetes meant that challenges were communal, and a sense of sympathy and solidarity were achieved.

The question “What does type 2 diabetes treatment look like in South Trinidad?” takes into consideration more complex factors related to not only the physical, diseased body, but also the political, and social weight that the body carries. Biological citizenship and the criteria by which one is considered a biological citizen are therefore activated in the case of South Trinidad. Bodies in the area afflicted with type 2 diabetes navigate through suggested means of treatment differently with regards to access, in turn illustrating an inability to subscribe to a suggested medical norm. Simply put, an inability to purchase medication, attend doctors’ visits, or adopt
new, regimented diets inspired by North American conceptions of diabetes health management frames those in South Trinidad as deviant actors, unable to manage their health.

In Chapter 5, I take a more in-depth look at specific consumption patterns. The process of food preparation and consumption is inherently intimate, and as established in this chapter, an every day stigma that those with type 2 diabetes live with is being framed as overindulgent and irresponsible. We see how identity, stereotypes, knowledges, and identities play a role in the specific things that are consumed. My intent, in preceding Chapter 5 with establishing those with type 2 diabetes as biological citizens, is to demonstrate the relationship between the diseased body, and other inherently cultural items (such as food, specific dishes, meals). Those with diseased bodies are representative of a medical phenomenon wherein a study of consumption is necessary. This justifies a science of food studies within the study of biological citizenship, wherein food is understood as biologically and culturally relevant. Food in this case, tells a history of disease treatment and management that if often underexplored, given the nuance of consumption specific to geography.
In this chapter, I analyze how is food used as a means of diabetes treatment and management. I specifically look at how new diets are created by those with type 2 diabetes, and what types of knowledges inform these new diets. I also discuss how a change in past consumption patterns reaffirms an identity of illness, even though, for the most part, dietary changes are reflective of what participants deem to be 'healthy'. I go on to evaluate aspects of what makes certain foods healthy versus unhealthy, and delve into why certain foods are adopted and excluded from changed diets. I discuss ideas about the sensations of food, and how some sensations may be linked with ideas of health, despite other factors related to the nutrition, or energy yield of the food. Finally, I examine questions of deservingness, including when is one deserving of food and what food do they deserve. Notions of deservingness are heavily tied to the history of food and access in South Trinidad, as well as a history of folk ideas about food and food consumption.

What do dietary changes look like?

There was a resounding “yes” when I asked my interview participants, “Have your eating habits changed since being diagnosed with type 2 diabetes?” There was an understanding of food and consumption that framed their pre-diabetes consumption habits as needing a change. The quantifier “less” prefixed foods such as sweets, bread, rice, and meat, as cutting down on these five named types of food provided a basis for a more streamlined diet better meant to better manage their diabetes, and more specifically, their blood sugar levels. This section aims to evaluate some of the specific habits adopted, or, in some cases, re-adopted by participants to better manage their type 2 diabetes changes in staple foods, and views of junk, or pseudo-foods.
1. **Staple Foods**

Vegetables such as cucumber and lettuce made salads a newer dietary staple. While they were not a definite favourite, an effort was made by participants to include these vegetables into their daily lunches and dinners, usually cut up and on the side of whatever meal they were having. Fruit was always a staple, given its abundance throughout the village. “Well you know, now I go suck a mango,” Maggie said. During the time of my interviews, it was mango season, a favorite time within the village of Thick, with several neighbors with trees heavy with ripe fruit. Eating seasonal fruit was a common trend among those interviewed, with those who lived nearby each other in Thick getting mangoes from the same neighbor’s backyard, visiting and picking them themselves. The seasonality of mangoes and chennet made them a dietary staple pre-and post- type 2 diabetes diagnosis. “We used to eat mangoes all day growing up,” said Aminata, who also mentioned that she was currently trying to eat fewer mangoes than she did last year. If she does indulge, she eats them after eating and having other foods in her stomach. “The acid doesn’t agree with me. I need to eat a bread before I can eat a mango.” The thought of mango on an empty stomach elicited language related to her stomach “burning.” The bread (she pointed to a package of white dinner buns) is a barrier between her sensitive, worn stomach lining and the highly sweet acidic mango. “The bread sucks up the mango” is a reference to how the carb content of the bread cuts through the sugary goodness of the mango to formulate a more well-rounded eating experience. The pairing of these two foods rationalizes the consumption of both, therefore making it a more calculated, “healthy” meal.

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27 This idea echoes Chinese understandings of “yeet hay” (熱氣) (Cantonese) or “huo qi da” (火气大) (Mandarin) (Li, 2013), the belief that hot air accumulates inside the body (Lee, Brugge, Phan, & Woodlin, 2007). Yeet hay foods are generally those that are greasy, spicy, or ‘heavy’ on
The sugar content of fruit is highly debated beyond the study of food consumption in South Trinidad, with various diets ranging from those meant to help with weight-loss, muscle gain, or improving cardiovascular health having an array of views on how regular fruit should be consumed. Another uncovered benefit of mango season was the fact that it was often a time of the year where families saved money on food in general, as those with fruit would share their bounty, and a good portion of what was consumed daily were the gifted mangoes. The complexities in understanding yeet hay also mirrors complex ideas and sensations in what is called the Trinidadian “hot and cold” system. Lans discusses how Caribbean folk medicine has emerged from “European folk medicine, scientific medicine, African-based practices, Amerindian medicine and Indian-based medicine; a product of inter-group borrowing, or, medical syncretism” (Lans, 2006). A facet of the hot/cold system is that it is “cathartic in that remedies are taken to remove heat from the system”, a valence wherein heat opens the body and “facilitates the blood’s free flow” and cold “causes the blood to stop flowing and clog the arteries, veins, and womb” (Lans, 2006). Understanding the cathartic nature of this, it is understandable that teas are seen to have a “cooling” property, even though they are hot drinks, known to remove impurities from the system. “Purges” function to reduce heat, therefore “further ‘clean the blood’” (Lans, 2006). Popular terms associated with such folk medicines, as mentioned by Lans is “bitterness”, “cutting”, “cooling”, “building”, “purging” or “washing out” (Lans, 2006). Identified foods known for their folk medicine benefits specific to type 2 diabetes the stomach, such as fried chicken, or spicy stewed meats. Foods that are not yeet hay are said to balance out yeet hay foods, and should be eaten together, such as watermelon, or plain leafy greens. The understanding of yeet hay mirrors the complexity and story-telling aspects of ideas of food and consumption seen in South Trinidad.
and diabetes treatment by Lans, and noted as staples by interview participants include the following:

- Soursoup leaves prepared as a tea (Hypertension)
- Papaya, ripe and green, eaten (Hypertension)
- Coconut, shell and flower prepared as a tea or chewed (Diabetes)
- Sorrel leaves, prepared as a tea (Diabetes)
- Caraaili, cut up in slices and put into water, or, eaten (Diabetes) (Lans, 2006)

The nuance in understanding which foods are yeet hay, as well as the hot/cold contrast is reflective of the types of education and lessons passed down on a more regional, even household level. The rationale behind pairing certain foods based on their “feel” as opposed to their listed nutritional content draws upon an education that can only be obtained through oral histories and personal, physical experience, therefore, restoring a level of autonomy and agency in the individual making food and consumption choices based on their personal preferences.

Bananas were a hot-topic among my participants. “Never bananas. I don’t eat bananas, they are 100% sugar” said Nancy, who is a nurse at one of the hospitals in the South of Trinidad. “It’s natural sugar, but it’s still sugar. I don’t like that much sugar in my body,” Nancy elaborated. Again, ideas of feeling (sugar being in the body) were brought out when discussing this fruit. Maggie on the other hand, differentiated between “popular” bananas and “local” ones. “I don’t like the bananas we does get from here so when I get our own bananas, I eat that. I eat that organic.” Maggie was specifically referring to the smaller types bananas that grow wild in South Trinidad, usually harder in texture and milder in taste. During the pile-sorting activity, bananas were placed in the “healthy” and “neutral” categories of food classification, and was the
only unprepared/raw fruit that was found in both categories (all other fruits were either put into the “healthy” category, or placed aside/not categorized because of allergies/a general dislike for the fruit). Fruit such as apples, imported from the United States (generally Washington), were typed as special Christmas/Holiday foods. “We used to get an apple for Christmas if the weather wasn’t bad,” Paula said. “It was expensive. It means Christmas to us.” When pile-sorting participants were asked to categorize apples, many of them mentioned the same thing – that they were a special occasion food, imported from places with a “snowy winter.” While there was more than a handful of vendors with apples at the Debe and Fyzabad markets, they were not purchased as regularly as the mangoes, portugals, and papaya portions that surrounded them. Families were more willing to pay the $3 to $5 TT per apple in preparation for prayers ceremonies, or to give as offerings in Hindu religious ceremonies where those in the temple would offer statues of deities an array of fruit, mostly those with harder skins and textures, that oxidized slower, such as mangoes and papaya. Other offerings would include nuts, dried fruits such as apricots and dates, and prepared parrasaad.

Local fruits represent a safer, more economical idea of what healthy fruit consumption looks like. Sweetness was more so associated with unhealthy foods and consumption practices, that is, being wary of what “sweetness” is going into the body, and sustaining levels of blood sugar levels. Mitigating the effects of sweet foods with carb-rich foods gives the consumer a physical sensation of not “absorbing” pure sweetness. More expensive, imported fruit such as grapes and apples were usually reserved for special occasions, such as Christmas, but still, maintained a general impression of being healthy and something to be part of a good diet meant to manage type 2 diabetes.
Continuing ideas related to local foods, participants admitted to making more of an effort to purchase their weekly groceries from the local farmers markets as a means of incorporating fresher vegetable, fruit, cereal, and starch options to their diet. The following is a typical list\textsuperscript{28} of what was purchased at the market:

- Eggplant
- Bananas
- Plantain (‘Fig’, or ‘Green Fig’)
- Onions
  - Green, Red, and White
- Leaf Spices to make “Green Seasoning”
  - Bandania, Coriander, Thyme, Cilantro, Parsley
- Garlic
- Pimento
- Tomatoes
- Eddoes
- Pumpkin or squash (segmented)
- Bodi
- Avocados

These often fresh, locally grown foods with a high perishability were the ones most often purchased at the farmers market. A phrase that was often repeated while walking through the markets by patrons was, “Is this local?” When I asked one of my interview participants who wished to be kept unnamed about this, she mentioned that, “The local means it’s cheaper,” while Gloria, the youngest participant I had the opportunity to interview, mentioned that it meant that, “It’ll give you a better taste and flavor…maybe not better, but more Trinidad.” Therefore, “local” meant part of a food system that was wholly based in Trinidad, from growth to taste, and

\textsuperscript{28} Upon interview analysis, the listed foods were mentioned by all participants and being purchased at either the Debe or Fyzabad weekly markets. All foods were mentioned by name apart from “green seasoning” which is popularly known to be a mix of green onions, thyme, cilantro, bandania, parsley, and garlic (as listed).
could be tracked via the vendor to its fruition as a product for sale at the market. In one instance, I overheard an answer to “Is this local?”: “This here is from my sister’s plot up in Chaguanas.”

The perishability of food also meant it was a type of timer meant to ensure consumption by those interviewed. Despite admitting to eating less on their new regiments, an influx of perishable food purchased meant that they had to be thinking about how to prepare, and when to eat meals so that their purchases would not go bad. “We start cooking once we get home sometimes,” Aminatia explained. Her favorite purchase of the day was a generously-sized chunk of pumpkin, which she planned on cutting up, into one-by-one-inch pieces and stewing with oil and spices, a popular, economical savory dish eaten with saada roti.

All participants mentioned going to the markets weekly, either on Tuesday, Wednesday, or Sunday. This was a change from attending the markets more infrequently before their described food consumption changes. Re-localization happens when those with type 2 diabetes reorient their eating habits and rely on food systems that allow for a greater sense of knowledge and control about what foods are being purchased, cooked, shared, and consumed. Therefore, for individuals creating a new diet means markets and seasonally-available food become a hallmark of ensuring agency and knowledge. By hallmarking markets and seasonally-available foods, and frequenting markets, those with type 2 diabetes in South Trinidad create their own pathways towards their health, by prioritizing healthy, fresh foods made available to them via local vendors. This is an example of how those with type 2 diabetes mobilize as biological citizens and therefore are active agents in their own pursuit of health and illness alleviation.

2. The use of Pseudo-Foods: a necessary nuisance
Change also meant that generally unhealthy, pre-packaged snack foods took on a different utility in the everyday diet of those with type 2 diabetes. Carrying pre-packaged snack foods, such as Crix crackers, or mini versions of chocolate bars, were listed ways of making sure that their blood sugar levels did not dip too low, and prevented the physical sensations of light-headedness and dizziness often associated with low blood sugar, dehydration, or overheating. Putting these crackers, cakes, or chocolate bars into purses was routine before one left the house. Eating, and owning these snack foods were often problematized by medical professionals. The Bermudez Manufacturing Company operating out of Mount Lambert, Trinidad, is known for their brands of cookies and crackers, snack foods (chips, banana chips, nut mixes) and breads and cakes. Bermudez-brand snack foods are a staple of many convenience and grocery stores, and were mentioned as popular snacking foods in interviews and pile-sorting activities. While most of the Bermudez products were noted as being “unhealthy”, foods that were eaten less frequently after a diabetes diagnosis, and put into the “bad” categories by participants, they were still admitted parts of everyday eating habits as go-to snacks or breakfasts. “If I’m in a rush, I’ll eat a muffin…KISS has some nicer ones.” The unnamed participant, referencing KISS’ Apple Cinnamon Muffin and Banana Nut Muffin’s, marketed as “Heart Healthy” and coming in at just under 250 calories per serving.

While cakes and muffins, and cookies were discussed, and sorted as being “bad”, the fact that they were pre-packaged, and non-perishable meant that it was easy to have a KISS cake in your bag, and snack on it during the day, or eat it when blood sugar levels were relatively low, and one was experiencing a hypoglycemic episode. Here, we see two modes of how food is used to fuel the body:
1. Food as a tool to manage and control instances of type 2 diabetes, therefore, how the adoption of a healthier diet can help manage weight and blood sugar levels.

2. Food as a means of fueling the body for its every day processes and functions.

The body processes food differently once medication, such as the most commonly mentioned Metformin or Glucophage, is used as a first-line agent to treat type 2 diabetes. More specifically, Metformin must be taken with a meal, and therefore, medication use may change the daily eating habits of those with type 2 diabetes. While a healthy change in diet is typically characterized by the adoption and exclusion of certain foods, an aspect of what defines “health” is also whether one can readily access food to fulfill a need for daily energy and ensure that their medication is taken appropriately. As such, junk-food is understood to be unhealthy in the sense of new dietary changes, but, quite necessary and holding a specific utility when it comes to its ability to be easily transferred, purchased, and consumed. Fortunately, The Bermudez product brand allows consumers to still exercise a level of choice reflective of a preference for local goods, with the Bermudez food chain being more easily traced to its manufacturing plant in Mount Lambert. In contrast, participants articulated concerns about some other potential low glycemic index snacks that might be recommended to help with hypoglycemic episodes. For example, Vaughan (2005) suggested:

- Three Lucozade tablets
- Five Dextrosol tablets
- 10-15 glucose jelly beans
- 80ml (3fl oz) glass Lucozade
- 120ml regular fizzy drink

When I discussed this list informally during interviews (mentioning that I had read an article suggesting the following drinks/tablets/foods to help with hypoglycemic episodes), participants
shared their concerns. Lucozade is a soft drink marketed as a sports and energy drink with caffeine. Lucozade tablets contain the drink’s formula in solid form, with tablets dropped into a glass of water and dissolved for drinking. Energy drinks are a sensitive subject in South Trinidad after the passing of a young man in his 20’s as a result of a heart attack. He was known to drink various energy drinks, such as Lucozade, Monster, and Red Bull, and in light of his death, a fear and dislike of these types of drinks predominated the area. Jelly beans, made with gelatin, was not a common snack food, given the area’s Hindu population, who abstain from eating beef and beef by-products. Dextrosol tablets were not commonly used, but were generally known as a safe, reasonable option, alongside fizzy drinks, again, readily available like many of the Bermudez products. While Vaughan (2005) did make a useful list, reflective of what was available within a Caribbean context, the demography of South Trinidad meant that the list and suggestions were not reflective of knowledges and narratives on a local, community level that informed health. Of course, Vaughan could not have been aware of the young man’s death, and the demographics of practicing Hindus in South Trinidad. Nevertheless, the participant concerns I mention above serve to highlight that perceptions of health are shaped by localized narratives, histories, and experiences that then inform realities in diet and food consumption.

What can be understood from these observations is that, knowledge about what food *can* do rather than knowledge of what *food should* be consumed better places agency and autonomy back into the hands of those with type 2 diabetes. Reaffirming this sense of agency allows the person to navigate through spaces to find solutions that are culturally relevant to them and the political economy that influence their circumstances. From here, we see a transition from a delocalized food and disease management system to one that is relocalized, and indicative of situated knowledge and everyday experience.
Food and Feeling

The introduction of past methods of food and food consumption related to childhood was a staple of almost every interview I conducted. Common phrasing, such as naming foods as “old” and “new”, as well as “light” and “heavy” provided further insight towards what was esteemed in a new diet meant to better address and manage diabetes. For example, a “new”, “heavy” food would be chicken breast. An “old” “heavy” food would be potatoes. A “new” “light” food would be white bread (sliced, commercially prepared) and “old” “light” food would be roti or bake/baara (fried bread). A breakdown of how food was classified can be seen below. From these ideas of contrasts and feelings, individual participants crafted ideal diets and “sensations” they associated with health from both the interviews and pile-sorting activity.

Table 4: Classifications of food as “light”, “heavy”, “old” and/or “new”

<table>
<thead>
<tr>
<th>Food</th>
<th>Light</th>
<th>Heavy</th>
<th>Old</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mangoes29</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chicken Breast</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot-Dogs (Commercially prepared)</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>White Bread (Commercially Prepared)</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Roti (Saada)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roti (Buss-up Shot)</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curried Goat/Chicken/Beef</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Stewed Goat/Chicken/Beef</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

29 Mangoes were discussed as being both “heavy” and “light” depending on the participant. All participants classified them as “old” foods.
<table>
<thead>
<tr>
<th>Item</th>
<th>X</th>
<th></th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stewed Meat Sauce</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curried Meat Sauce</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potatoes</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plantains (Fried)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plantains (Boiled)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Crackers</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muffins (Commercially prepared)</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bananas(^{30})</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pizza</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cheese</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sweet Drinks (Regular)</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Sweet Drinks (Diet(^{*}))</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

\(^{*}\)Considered anything marked as “Diet” or “Zero-calorie”.

A food that was classified as “too heavy”, and thus, uncomfortable and not ideal was that of cooked meat. This included both stewed and curried varieties of goat, chicken, and beef, as well as other types of meat preparations, such as fried chicken, grilled steak, and baked chicken breast. Despite these cuts of meat being fresh and local, the “fleshiness” of the meat led to its classification as “heavy”, and not ideal for a diet that should be dominated by light foods. This was a particularly interesting given that chicken breast (baked, lightly seasoned) was advertised (via commercials) and advocated (via restaurant menus) as a “lighter” “healthier” option compared to other meat-centric dishes. Conversely, the sauces created by stewing, or currying

\(^{30}\)Bananas were mentioned as “light”, “heavy”, “new” and “old” by various participants. This is perhaps reflective of the various opinions I got over whether nor not they were considered “healthy”.
meats were very common ways in which participants still enjoyed meat flavor without having to indulge in the flesh, despite sauces being known for their higher sodium content. Complimenting these sauces would be rice or roti, solidifying them as staples in more indulgent meals (with meat) and less indulgent ones (without meat, with only sauce). More about this type of consumption is explored when looking at ideas of deservingness later in this chapter.

By far the most popular types of “bush” medicine mentioned was caraali and saiijan leaf mixed with water. Bradley mentioned that the leaf made him feel “lighter”, again, referencing the “light” and “heavy” contrast. Most of the participants I interviewed, at the very least, mentioned the importance of caraali as a vegetable dish, usually lightly fried with salt, pepper, pimento, and other seasoning. Another popular bush concoction was okra water, where the leftover ends of okra, prepared for frying, were added into bottles of water and left in fridges. After some time, the okra would turn the water thicker, giving it a slimy, smooth consistency, much like the inside of the vegetable itself. “You can feel it going down your throat…it feels nice,” Maggie said. “Whatever is inside you sticks to it.” Again, referring to Lans, the idea of “sticking” mirrors some of the language used to describe results of folk medicine, namely related to the idea of “drawing out” (Lans, 2006) heat, or other impurities from the body. With regards to “purging” again, mentioned by Lans, a popular remedy that was passed around and mentioned by individuals was to, after engaging in a calorie-dense, hearty meal, after some time has passed, only eat mango until one experiences diarrhea, therefore purging the body. A feeling of “lightness” would be achieved after the bout of diarrhea, therefore, rationalizing the large meal

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31 Popular name for medicine made of plant or plant material. The use, and significance of bush medicine is transferred through traditional, Indigenous knowledges.
and overconsumption of mango. Ultimately, the feeling of “lightness” justified the discomfort of diarrhea, again, reflective of some of the sour, bitter tastes of teas brewed of soursoup or caraali.

Local Preferences and Loyalties

Food and food memories have long been associated with the joys of nostalgia. Sutton (2010) suggests that food memories constitute as a type of “historic consciousness” that mimics how both the past and food is remembered. When discussing how diets have changed since a diabetes diagnosis, many of my participants remarked that “eating like how they used to” was a necessary practice worthy of re-adopting. As such, there was a fierce loyalty that participants had to specific food items and dishes that they ate in their youth. This usually included fruit, such as mangoes, bananas, chennet, portugals, coconut, and lemons (to make tea or to season food with), starches such as yams, eddoes, cassava, carbs such as roti, rice, bodhi, okra, and proteins such as chickpeas, pigeon peas, tomatoes, stewed and curried meat. Further insights reveal that these foods, and the frequency of consumption (small breakfasts, large lunches, small dinners, few snacks) were replicated in a reformed ‘healthy’ diet post-type 2 diabetes diagnosis. Eating less, a staple of dietary advice for weight-loss, was also articulated as a way in which “eating like we used to” was acted. This being, recalling food, diet, and consumption patterns from when food was less affordable/accessible served as a tool to help those interviewed lose weight, and helped them in reestablishing a relationship with food that was of necessity, and not excess (Broom & Whittaker, 2004, p. 2373). Rearticulating a relationship with food in this way is reflective of some of the issues presented when a type of blame is put upon those with type 2 diabetes.

32 This list was compiled through interview participant insight, and the works of Ramdath, Hilaire, Brambilla and Sharma, who in their article Nutritional composition of commonly consumed composite dishes in Trinidad” identified specific dishes based on their popularity, locality, and cultural and ethnic histories (Ramdath, Hilaire, Brambilla, & Sharma, 2011, p. 38).
Deservingness, Charity, and Poverty – Relocalization of diets and reclaiming ideas about health and diet based on personal histories and shared narratives

“No no no no, I don’t eat the meat of the chicken. Just some bone and sauce. If I eat the meat, it’s just so” Nancy cupped her right hand to show what could be held between her forefingers and thumbs. She was visibly off-put by the mention of meat. “Not the flesh, none of that.” - Nancy

Ideas related to food and sensation played a role in determining who was deserving of more substantial food, and what was defined as something more substantial. As mentioned previously, “new”, “heavy” foods such as chicken breast and cheese are reserved for children and younger adults in the area, if they are purchased at all. Participants such as Aminata and Dennis noted that, in general, this was due to a general preference for traditional cuts and preparations of meat. The most popular meat dish as per the pile-sorting activity was curry chicken and stewed chicken. The non-meat ingredients, such as curry powder, onion, green seasoning, and such, are household staples, and the preference to use whole, cut up chickens meant that this type of meat could be as far as a small, local grocery store, or, in most cases in South Trinidad, right in the participants back yard.

Dennis, after retiring and being diagnosed with diabetes, discussed how his positionality as a more devout Hindu meant that he tried to eat less meat. This again, was not uncommon in the area. Many in Siparia, if not practicing Hindus, were raised as such, or, had older family members that were still practicing. Eating habits influenced by the faith meant there was no consumption of beef of any beef products, no meat consumption on select days of the week (many I interviewed did not cook, or eat meat on Tuesdays, Thursdays or both), or ate no meat products, but still would enjoy milk-based products, such as butter, or alternatives such as eggs, or meat gravies/sauces. On the note of memory, participants including Dennis, Aminata, Akiel, Ingrid, and Sima considered meat to be a food that they were only introduced to later in their
lives, and that it was seldom eaten in their youth. In reconstructing healthy diets, and drawing onto personal narratives and histories, the remembering of a “healthier” past for many, including these participants, means less meat, and reverting to a diet that was popular when money and access to higher-end grocery stores were scarce.

“No flesh, only the bone,” was an idea I heard often, usually said with conviction and correction. In the case of Nancy, she was almost put off by the idea that she would eat meat, despite that I regularly shared meals with her where she did, in fact, eat pieces of stewed, curried, and fried chicken. I was intrigued by a refusal to eat flesh. Chewing through flesh and savoring meat meant having it sit, on average, in your stomach for a longer time than fibrous vegetables that digested more easily and in less time. No one I interviewed took pride in their meat consumption, despite taking pride in the taste and flavor of their meat-based regional dishes. From here, we can evaluate a sense of undeservingness, but also, a construction of what ideal meat consumption looks like contrary to physician suggested servings. Ideas of an ideal serving were Nancy, admittedly, someone who does not prescribe to more historical or folk ideas about health, favored salty, oil-based meat sauces against the more substantial, less caloric fleshy pieces of meat made available to her. In these contexts, where food is accessible, as in, ready for the sharing, it was interesting to see how, despite appeals by medical professionals to reevaluate the role of protein in their diet, meats were still unwilling to be staples of immediate meals.

This was contrasted to the Eid and other celebrations that I had the opportunity to attend, where the consumption of the volumes and types of food was legitimized not only because of the infrequency of the event, but the role that these participants took in food preparation. Five of my participants made up the crew of those who prepared the savoy spread of stewed pumpkin, curried chickpeas and potato, stewed and curried goat and stewed and curried chicken. A
newfound value was seen in the food as it represented the generosity in the community and allowed for others to contribute to the value of the meat, transcending its monetary value and therefore becoming something reflective of this community gathering. Consumption of meat in this context was rationalized and invited by those with type 2 diabetes, as it was not an indulgence, but an opportunity to enjoy the fruits of their labors among a larger group, all of whom they prepared the food for.

Participants all agreed that a dietary change to help manage their diabetes was easier, and cheaper than alternatives related to prescription medication and exercise. Interestingly, there was no mention of the gendered division of labor that dictates how food is prepared and consumed by interview participants. Family matriarchs often admitted if they were the ones to prepare meals/lunches/dinners for the day, however, there was no gendered language used to devise roles related to cooking. During the Eid celebration, both males and females were responsible for setting up the gas ranges/wooden fires that large pots of cut and seasoned meat were put up on. The only real mention of gender was specific to both male and female participants commenting on the abductions, murders, and harassment that women (both young and old) face in South Trinidad. Their commentary, like their discussion of food, was leveraged by past collective memories and compared with contemporary ideas about women’s mobility and autonomy. Older female participants (those in their 40’s +) would mention how they “used to” be able to walk down the street, to the market, and to friend’s houses without any fear of harassment.

Body heat, and the creation of sweat was important in determining if a workout was “working” or not. Nancy stressed the importance of her and her husband wearing sauna suits
while exercising.\textsuperscript{33} “You don’t lose weight unless you have heat, and you’re sweating; your body temperature has to be higher than the temperature outside for you to lose weight,” she told me, as advice for tracking how useful her workouts have been. I found her take on the issue interesting, given that out of all interview participants, she was the most knowledgeable about the science of weight-loss given her job as a nurse. It was clear that her take on weight loss and exercise were adopted by others in the area, particularly Maggie and Aminata who lived nearby, and would sometimes use her household treadmill. “Taking a sweat” was a popular colloquial term for exercising, with people announcing it before heading off to Nancy’s treadmill, usually anywhere from 20 minutes to an hour. Nancy’s influence was also reflective of findings of a 2015 survey submitted by for 100 health care professionals (HCP) who were asked about barriers to optimal diabetes care in Trinidad. Approximately 90% of HCP participants reported that nurses could play a more active role in various aspects of diabetes care. Examples of care included the following:

- leading patient education efforts
- educating family members
- screening patients for complications
- coordinating care efforts (Roopnarinesingh, et al., 2015)

This observation is especially important when taking into consideration the Empowerment Model, which is rooted in acknowledgement, with a first step as “diversity”. “Diversity”, Thesen argues, replaces stereotypes (Thesen, 2005, p. 51), therefore suggests a re-educating, and re-articulating ideas about type 2 diabetes to patients and family members. Nurses are gatekeepers,

\textsuperscript{33} A garment made up of long-sleeved pants and long pants designed to make the wearer sweat profusely. Some suits are made of nylon-coated cloth, or PVC.
almost in a sense, nominated by the medical community that participated in the aforementioned survey. Except for “screening patients for complications” and “coordinating care efforts,” it can be inferred that “leading patient education efforts” and “educating family members” can be done without the need of sophisticated medical equipment, but instead, with the more personalized efforts of conversation, especially since those in South Trinidad already use oral information sharing as a main way of education and support.

While Nancy did not stress her own importance as an educator within her community, it was seen via my time in Siparia, specifically Thick Village, that she was a gatekeeper of medical knowledge that was otherwise inaccessible to the average resident, who may not have the ability to travel to clinics, or to San Fernando General Hospital as frequently as suggested. The specification of nurses taking on the role of education, screening, and coordinating efforts is reflective of their jobs overwhelmingly resorting to phlebotomy instead of specified patient care (Roopnarinesingh, et al., 2015, p. 5). This deviation from a staunch biomedical role and one that focuses on communication, and the lack of “human resources” (Roopnarinesingh, et al., 2015, p. 5) in healthcare echoes the long-term understanding of the need for patient-centred care, but complexities in securing its execution.

Suzanne, a retired school teacher, was the only person to mention that she tries to use cookbooks to find recipes to help manage her diabetes, and find out ways to, in general, live a healthier lifestyle. Suzanne was kind enough to invite me into her home and showed me her arsenal of cookware appliances and accessories, many of which were purchased specifically to make bulk-meals and new recipes. A favorite of hers was a lentil dish, prepared in a large slow-cooker. “I try to follow, that, you know, low GI? I’m reading up on that.” She mentioned that the cookbooks she had were gifts, some of which came from her daughters who live in Canada, and
that she genuinely enjoys reading, making books, and sometimes, looking up things on the computer/using internet a source of knowledge for her. Suzanne was the only participant interviewed who specifically said she tries out new recipes/has explored cookbooks to find new diets and dishes that were low-calorie and/or low-fat. Despite internet packages being affordable and very common in South Trinidad, no one but Suzanne mentioned looking information up on the computer specifically when asked about how they find information about managing their diabetes.

Concluding Thoughts

This chapter has evaluated how food consumption and dietary change are the most accessible forms of diabetes management. Knowing this, once one is diagnosed with type 2 diabetes, they call on different knowledges about food that are not necessarily informed by diabetes-centric meal plans and suggestions by doctors, but what historical knowledges and advice arises from the community. Folk medical treatments (the use of bush medicine) was very popular, as a means of supplementing the use of medication (most popularly Metformin), however, both types of medicine carried a level of skepticism influenced by ideas related to the overall inability for one to truly live a lifestyle that will mean their type 2 diabetes will not be a cause of immediate medical concern. This is a continuation of the medical identity, one transgressing public and private spheres, problematizing food consumption (past and present eating habits) therefore making a meaningful, “correct” change that much more difficult for participants. Simply put, there is no “winning” when it comes to following a proper diet given biomedical models of treatment (doctor’s suggestions of eating more protein, fewer snacks, less sodium), however, there is a sense of reclamation and restoration of agency, when participants were able to follow-through with their own ideas of healthy consumption. This included using
feelings of “lightness”, “oldness”, “newness”, increasing consumption based on seasonality, and recalling older diets and consumption patterns from when their eating was characterized as sparse and necessary as opposed to overindulgent. When paired with an understanding of biological citizenship, we can see participants valuing a “thrifty” body, or, one that occupies less space, needs fewer resources, and is understood as not taking anything away from the non-diseased population that it lives among. This take on those with type 2 diabetes, namely, that they are “undeserving”, again, recalls a time where one’s diet was characterized by self-reliance on local crops, and generally when money needed to be better rationed and not spent extravagantly on foodstuffs.
Chapter 6 Conclusion

In this thesis, I have evaluated the experiences and food-consumption habits of 22 participants with type 2 diabetes in South Trinidad. I have also, through participant observation, examined the popularity of certain types of food and modes of consumption in South Trinidad. Using a framework rooted in biological citizenship, I was able to evaluate the biological and social factors that went into conceptualizing their type 2 diabetes, and furthermore, how the consumption of culturally-relevant foods plays a role in managing type 2 diabetes. I used the narratives of participants to better conceptualize type 2 diabetes, unique to the social construction of illness, as well as the colonial history of South Trinidad acting as a precursor to the stratification of medical resources throughout the island. As I have discussed, there is a body of work to establish the use of an explanatory model to better juxtapose patient narratives and histories, however, I have specifically used it as a tool to critique ideas about treatment presented by a staunch, biomedical model of illness, that often casts patients as passive actors in their course of treatment.

I first made clear how a geographic divide in South Trinidad, as a result of a colonial influence, has stratified the island. This stratification has allowed for a more robust development of healthcare resources to the north of the island, with those to the south of the island less likely and easily able to travel to hospitals and clinics. This inability to access medical institutions is further explored using Paul Farmer’s insight on structural violence, wherein there is a legacy of resiliency; those in South Trinidad have used cultural traditions to help adapt to an inability to readily access medical professionals.

Unfortunately, within the course of medical treatment, there is often a very prescriptive means of what steps lead to an ultimate goal of health. Ignoring the cultural aspects of what one
defines as disease, and thus, treatment, means that a rich history of how said illnesses have been
managed in the past, as well as the resources traditionally used to overcome illness, or maladies
in a larger sense, beyond the use of contemporary medicine and its access is ignored, and under
researched. When more contemporary treatment methods being unfeasible (such as an increase
in exercise, or suggested changes in diet), those bodies marked by illness are unfairly cast as
“irresponsible” based on a general understanding that diseased bodies should, as per citizenship
responsibilities, search, and retain a healthful norm. Deviation from the norm, and a new
diseased identity, therefore mobilizes those with type 2 diabetes in South Trinidad to activate as
biological citizens, reorienting, and reaffirming their relationships with their health and access to
food in ways that does not problematize their diseased bodies within a community of said bodies.
There is a certain sense of security, agency, and camaraderie found in ideas of health that are
understood within cultural and, in the case of South Trinidad, geographical contexts.

By moving from an oppression to an empowerment model in clinical practice, there is a
greater opportunity for those who hold medical knowledge to defy historical biomedical
precedent and make their patients active agents in how they take care of their health,
empowering them to continue with a medical discourse that is reflective of attainable healthful
goals. By making patients active agents in the pursuit of culturally-relevant healthcare, and better
understanding their conceptions of disease and treatment, there is now an appeal to better divulge
into specific narratives for the sake of understanding resources that help form ideas of health and
treatment. From here, we can see how a critique of physician tendencies can help rationalize why
a nuanced account of the every day experiences of those with type 2 diabetes is a necessary step
in diabetes education. Navigating through biomedical spaces that often problematize patient
lifestyles and diets without the opportunity for elaboration or understanding have created unfair
stereotypes on those with type 2 diabetes, often making said patients reluctant to follow through with doctors’ appointments, or sometimes, wary of medication.

I have explored ways in which the seasonality of food has, for some time, acted as a way those in South Trinidad managed finances, and is representative of how community members in Thick Village support each other through the sharing of crops. Participants were quick to mention how a staple of their diet during the rainy season was mango, therefore, acting as an opportunity wherein households could save money. A tendency to prefer local vegetables and herbs meant that some participants, after a type 2 diabetes diagnosis, did in fact spend more time shopping for food, preferring to travel to weekly famer’s markets, where a sense of locality meant they could navigate through public spaces with a level of comfort reflective of parameters wherein a cultural milieu allowed them to be around, sample, and purchase food.

Folk ideas of medicine discussed by participants was reflective of ideas relating to the Trinidadian hot/cold contrast, wherein heat ‘opens’ up the body, and advocates for healthy bodily functions. Foods, and teas that allowed for the body to ‘open’ up were associated with participants’ past dietary staples, such as local fruits, vegetables, and past patterns of consumption, for example, eating seasonal foods in excess to save money as previously mentioned. This idea of past diets and dietary staples was a facet of interviews; participants would often reflect on their upbringing, when they had relatively less income, as a time when they were healthier. This relates to ideas mentioned about deservingness and poverty- wherein a body that deviates from societal norms is deemed undeserving of certain spoils. As such, those with type 2 diabetes often eat less meat, and shy away from eating excessive amounts of food, especially in social settings. This preference of smaller meals, and a definite need to keep blood sugar levels in-check meant that those with type 2 diabetes developed a preference for pre-
packaged snack foods. Given the quick perishability of a lot of home-cooked meals, these snacks allow those with type 2 diabetes to feel more at ease when taking medication (to be taken with food) despite being known, and categorized as unhealthy.

Diabetes treatment is experienced differently in South Trinidad given its unique food culture, inspired by past and current knowledges of health and wellness. I have argued that diets inspired by local narratives of health are more accessible, and therefore allow the individual to feel healthier, and more in-control of their diets, and bodies. However, this rearticulating of health based on more localized food sources and diets can be seen as problematic in a contemporary sense, since it can sometimes arise as contrary to more accepted ideas about diabetes treatment. For example, participants interviewed tend to favor meat sauces instead of actual pieces of meat, which is understandably a less healthy option given the protein to sodium ratio of meat versus stew sauces.

I have argued that contrasting understandings of food have allowed for a systematic way for those with type 2 diabetes to order and re-organize their diets, again, reflective of the level of organization that characterizes biological citizens. This organization, inspired by both traditional and contemporary knowledges about healthcare has been a way for those with type 2 diabetes to, again, reaffirm and reorient their relationship with food in a way that is relevant to their own conceptions of health and wellness.

What can be inferred from my work, and what I now suggest, is that this account and classification of those with type 2 diabetes as biological citizens only scratches the surface of how biological citizenship is understood within a population of those with diseased bodies. While work on biological citizenship has been influenced by classical takes on Foucault, much
of the literature on biological citizenship appears in the 2000’s, with less than 20 years of research in the field. In the future, a more exhaustive ethnographical account of those with type 2 diabetes within a framework rooted in biological citizenship is needed for there to be a solid edition to a body of growing literature on these topics.

For future research on diabetes, ethnography, and South Trinidad, I think that a valuable course would be to elicit local narratives and oral histories of food and consumption beyond that of its biomedical importance. It quickly became clear that there is a huge gap in literature relating to how conceptions of health were developed in part to the ‘feelings’ of food. Likewise, when discussing ‘light’, ‘heavy’, ‘old’ and ‘new’ foods, a language of food is clear, but not something that is understood in more academic, or professional terms. What I mean by this is that discussions of food as part of a larger discussion of diabetes tend to reflect a biomedical model of understanding of food, and what it can, or has done to the human body. While its utility is understandable, this aggregation of knowledge and language removes a dimension of social and cultural understanding about disease. This insight intersects with growing body of literature and studies that attempt to standardize tools for diagnosing Type 2 diabetes, in hopes of having a working, world-wide definition in order to collect more representative statistics (Alberti, Zimmet, & Shaw, 2006, p. 472). While this is necessary from a biomedical standpoint, further standardizing what diabetes treatment and prevention looks like is highly problematic based on the diversity of sufferer profiles that emerge when ethnographic studies are done in understanding the day-to-day lives and diets of those with type 2 diabetes. In the future, more research into how the creation of such studies, its execution, and the transmission of knowledge about diabetes can inevitably make diabetes treatment measures more difficult to understand and adhere to is necessary for a meaningful critique of the biomedical model.
When thinking about my own work and experiences, in the future, I believe it would be worthwhile to better formulate a pile-sorting activity that took up less space, and was more easily done with participants who were confined by limits of space and time. The choice of a pile-sorting or free-listing activity would have provided me with a better opportunity to engage with participants in environments where I did not have a table or flat surface ready. This was often the case for when I held interviews, and then had participants immediately interested in doing the pile sorting activity.

Given my access to living in Thick Village and being able to connect with a number of potential interviewees and pile-sorting participants, I think a research project based on follow-up interviews or journaling would have given me the type of necessary daily dietary insight that goes into really understanding what consumption looks like unique to South Trinidad. Participant enthusiasm was definitely high, and such methods could be used with some participants, depending on their schedules, abilities, and interest. An option for online or web-based surveys is something that I believe would be successful in the area, especially given that most participants owned smart phones and were digitally literate.

Having interviews in participant's homes was the safest, and most effective way of ensuring that interviews and pile-sorting activities were recorded and carried out correctly. In more rural areas of Trinidad (such as South Trinidad) many homes are designed with areas where visitors do not need to physically come inside the home, but can still sit in balconies, galleries, or smaller garages. Before conducting my fieldwork, I thought more neutral areas, such as malls, or public meeting areas, would have been preferred, however, they obviously require more time to get to, and cannot be guaranteed to be free/available for us to sit-down for an extended period of time. I believe that going to participants houses allowed for them to feel more
in-control of the interview, ultimately choosing where we were to sit, and dictated the mood by their demeanor.

This thesis also stresses the importance of using ethnographic research to better critique, question, and evaluate current medical models of type 2 diabetes treatment. An explanatory framework was able to extrapolate aspects of every day experience with type 2 diabetes that often go unanswered in stauncher biomedical spaces. While there is an undeniable utility and need for these spaces, this thesis showcases a need for otherwise more qualitative data analysis in evaluating the effectiveness of current measures. South Trinidad has been on the receiving end of poor medical infrastructure, from the lack of hospitals in the area to the difficulty of travel throughout the island. The historic nature of this difficulty in receiving care, therefore, makes it harder to, in a quantitative context, rank, or score experiences that participants have with regards to care and medical access. While an explanatory-based data collection project does take considerably more time-per-participant, there is no denying the therapeutic implications of allowing participants to share their experiences, triumphs, and frustrations. This, therefore, is a study with implications for the facilitation and creation of better medical policy and processes, even on a micro-level.

Elaborating on this insight stresses the importance of public issues anthropology. This thesis was made possible by the participants, and my choice in using an explanatory framework, and biological citizenship as key and guiding concept. The vision provided by interview participants laid a guideline and idea of what the pile-sorting activity looked like. Positioning participants as biological citizens meant that there was an understanding of biology in relation to the individual that made them an expert in the field of every day experiences with diabetes. Putting them as an authority on the subject matter presented participants with an opportunity to
harness agency in discussing their experiences with a level of candor and excitement that might otherwise not be possible in situations with a more enforced level of power and authority. Making this distinction, and using known academic terms, frameworks, and ideas in ways to ensure those of the public were central to the direction taken in this thesis, makes my work public issues/publicly engaged anthropology, with take-away lessons that are accessible and understandable to the population that made this work possible.

My experience conducting fieldwork in South Trinidad has allowed me to experience research collection in an environment where I have a personal and familial connection. I must acknowledge my privilege in finding ready and willing interview and pile-sorting participants. As such, I was able to feel comfortable and navigate with ease through a new, and inviting field site. While the experiences of culture shock and homesickness were not totally lost amongst me, I cannot help but think these feelings were lessened given my love and personal attachment to the site. I must note that some of my success in finding participants and perhaps their honesty and comfort sitting down with me for interviews/pile-sorting activity is due to this as well.

Unlike a researcher who may not have ancestry, or family from Trinidad, I did not physically stick-out (other than my Canadian accent). While unnoted in the non-anthropological literature, Dossa notes that this having an interviewer look, or have a basis of identification with the interviewee can create a level of comfort that might otherwise cast me, as the researcher, or participants as the “other” (Dossa, 2013, p. 436). While I agree that this was somewhat my experience, there was still an air of hesitation while exploring topics related to more taboo subjects, such as alcohol consumption. I often found that, at first, participants were quick to share their stories of discipline and how regimented they were in their eating and medication
schedules, however, as interviews progressed, participants felt so inclined to share their challenges in managing and controlling their illness.

Although I have presented a case for how type 2 diabetes is understood, treated, and conceptualized in South Trinidad, and how food consumption plays a huge, unique role in treatment, this only scratches the surface of what is a complex medical-social-cultural phenomenon. Understanding cultural constructions of illness and disease is important for all medical practitioners, as it unlocks a myriad of rich, necessary insight towards a complex story of access, health, and care. Medical and nutritional anthropology work together to help forge a better understanding of illnesses, and thus, how to carry out the collection of a relevant, useful ethnographical study. By using these narratives, there is a better understanding and assurance that more nuanced accounts and information is, and should be consulted in crafting ideas of health, wellness, and overall type 2 diabetes management and treatment.
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## Appendices

### Appendix 1

**South Trinidad Demographics and Maps**

<table>
<thead>
<tr>
<th>Corporation</th>
<th>Land Area (km²)</th>
<th>Population (2011)</th>
<th>Population Density (/km²)</th>
<th>Urban Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Siparia Regional Corporation</td>
<td>495</td>
<td>86,949</td>
<td>176</td>
<td>Cedros, Fyzabad, La Brea, Santa Flora, Siparia</td>
</tr>
<tr>
<td>Point Fortin Borough Corporation</td>
<td>25</td>
<td>20,235</td>
<td>809</td>
<td>Point Fortin, Guapo, Techier</td>
</tr>
<tr>
<td>Penal-Debe Regional Corporation</td>
<td>246</td>
<td>89,392</td>
<td>363</td>
<td>Penal, Debe</td>
</tr>
<tr>
<td>San Fernando City Corporation</td>
<td>19</td>
<td>48,838</td>
<td>2,570</td>
<td>San Fernando, Marabella</td>
</tr>
</tbody>
</table>
Appendix 2

Semi-Structured Interview Questions

Part 1: General Questions

1. What is your gender?
2. How old are you?
3. What is your marital status? Do you have any children?
4. What is your job/profession? What are your past jobs?
5. When were you diagnosed with diabetes? What prompted you to go to the doctor/get checked out?
6. Does anyone else in your family have diabetes? Immediate or extended?

Part 2:

7. Have your eating habits changed since you were diagnosed with diabetes?
8. Are there any foods you eat more of since your diagnosis? Any foods you eat less of?
9. Take me through what you eat in a typical day. When do you eat? What do your meals/snacks/drinks look like?
10. What is your favorite meal? Which meals and/or foods do you eat most often?
11. What do you order/get when you eat out?
12. Tell me about how you eat during Christmas/Birthdays/New Years/special occasions. How does this differ from what you typically eat during the week/on average?
13. Where do you get your groceries?
14. What does your typical grocery list look like?

Part 3:

15. How has your eating, and buying habits changed since being diagnosed with diabetes?
16. In what other ways do you manage and control your diabetes?
   a. Do you use any herbal remedies?
   b. Have you visited any traditional healers?
   c. Where else do you get advice?
17. Is there anything else you’d like to tell me about your experience with diabetes?

---

34 Questions were created in adherence to an explanatory framework
Appendix 3

Pile-sorting Activity\textsuperscript{35}

1. Divide the cards into 3 categories;
   a. Food that you enjoy
   b. Food that you eat, but aren’t your favorite
   c. Food that you do not eat/do not enjoy
2. Divide the cards into 3 categories
   a. Food that is good for you and your management of diabetes
   b. Food that is neither good, nor bad for you in your management of diabetes
   c. Food that is bad for you and your management of diabetes
3. Using the cards, put together what your typical daily meals look like
4. Using the cards, put together what you would eat during special occasions

\textsuperscript{35} Questions were created in adherence to an explanatory framework
### Appendix 4

**Participant Profiles**

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Age</th>
<th>Profile</th>
<th>Diagnosed/Number of Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aminata</td>
<td>74</td>
<td>Former hotel maid, stay-at-home mom, Admittedly overweight</td>
<td>N/A</td>
</tr>
<tr>
<td>Paula</td>
<td>54</td>
<td>Babysitter, former cook at a casual fast-dine restaurant, Admittedly overweight</td>
<td>N/A</td>
</tr>
<tr>
<td>Nancy</td>
<td>37</td>
<td>Nurse, Admittedly overweight</td>
<td>7 years</td>
</tr>
<tr>
<td>Maggie</td>
<td>60</td>
<td>Caretaker, former cashier, Admittedly overweight</td>
<td>N/A</td>
</tr>
<tr>
<td>Rosa</td>
<td>75</td>
<td>Bar owner/barkeeper, Admittedly overweight, has lost weight in the past 2-3 years</td>
<td>8 years</td>
</tr>
<tr>
<td>Salisha</td>
<td>60 (Approximation by participant as she did not know her true age)</td>
<td>Recent weight-loss (20-25 lbs)</td>
<td>4-5 years (approximation)</td>
</tr>
<tr>
<td>Sally</td>
<td>58</td>
<td>Admittedly overweight, has lost 10-15 pounds this past year</td>
<td>N/A</td>
</tr>
<tr>
<td>Gina</td>
<td>22</td>
<td>Recent secondary school graduate, Admittedly slim/of average/below average weight</td>
<td>N/A</td>
</tr>
<tr>
<td>Name</td>
<td>Age</td>
<td>Years</td>
<td>Occupation</td>
</tr>
<tr>
<td>----------</td>
<td>-----</td>
<td>-------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Suzanne</td>
<td>64</td>
<td>4</td>
<td>Principal of a secondary school, former teacher Admittedly overweight, has been losing weight due to diet this year</td>
</tr>
<tr>
<td>N/A</td>
<td>61</td>
<td>20</td>
<td>Government worker (Employed through a program that connects women with jobs in the community; currently working as an office cleaner)</td>
</tr>
<tr>
<td>Nina</td>
<td>57</td>
<td>19</td>
<td>N/A</td>
</tr>
<tr>
<td>Hanna</td>
<td>58</td>
<td>4</td>
<td>Store clerk Admittedly slightly overweight</td>
</tr>
<tr>
<td>Sima</td>
<td>52</td>
<td>4-5</td>
<td>Geriatric Nurse</td>
</tr>
<tr>
<td>Mona</td>
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<td>N/A</td>
<td>Could not recall</td>
</tr>
<tr>
<td>Dennis</td>
<td>60</td>
<td>8</td>
<td>Retired, former production supervisor Admittedly overweight</td>
</tr>
<tr>
<td>Martin</td>
<td>54</td>
<td>8</td>
<td>Truck driver</td>
</tr>
<tr>
<td>Geeta</td>
<td>48</td>
<td>12</td>
<td>Homemaker</td>
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<tr>
<td>Akiel</td>
<td>74</td>
<td>36</td>
<td>Retired, former principal/teacher</td>
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<tr>
<td>Bradley</td>
<td>46</td>
<td>3</td>
<td>Landscaper, oilfield worker</td>
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