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Taste matters! A qualitative study of eating traditional vegetables among Bangladeshi immigrants living in Venice, Italy

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Abstract

There has been increasing interest in studying and identifying the immigrant's food beliefs, dietary changes, medicinal perception of food, and acculturation. Studies have analysed the migration in Europe and their way of living. There is a lack of study about Bangladeshi vegetable consumption in the host country and how the choice of vegetable consumption depends on various factors. It is important to study the knowledge about the traditional culinary practice of a particular ethnic group that can be implemented to solve problems related to the health of the migrant groups. Moreover, in the phase of global change, various calamities like food scarcity, loss of diversity, and high frequency of extreme events are arising, studying migrant's food believe can play a crucial role to offer potential solutions for the rising problems. Income, level of education, religion, and food beliefs are significant factors accounting for changes in dietary habits, whilst immigrant generation is also a major factor. 30 individual semi-structured interviews of the Bangladeshi immigrants were undertaken in Venice, Italy between October 2019 and January 2020. In order to gain perspectives about vegetable consumption and selling vegetables as a job, the research was restricted to 10 sellers and an equal number of male and female consumers.

The study found out that the meaning of eating traditional vegetables for the Bangladeshis is 'taste' and availability of the vegetables, even the rarest vegetables (drumstick, teasel gourd, Bangladeshi olive) are still consumed by the Bangladeshi immigrants and participants mentioned attempt to grow vegetables that are mostly imported. Several important medical uses have been reported. Treating digestion and diabetes are of particular importance. Besides relying on medicines, the immigrants use traditional ways to cure these health problems. For instance, when they get digestion related problems, either they take medicine, or they simply exclude the food that they believe causing the problem. Bitter gourd was reported as a cure of diabetes, several vegetables (Indian spinach, spinach, bottle gourd) are believed to have blood purifying properties. While there is a major effort of the first-generation migrant, significant lacking was noticed among the second-generation migrants to stick to

the traditional culinary practice. Data presented in this study shows taste perceptions and culinary uses of traditional vegetables are deeply biocultural. The perception of taste can change many times during the stay in the host country depending on the individual's experiences. Although the taste of Bangladeshi grown vegetables differs from the Italian grown, the main satisfaction lies in the availability of Bangladeshi vegetables that eventually plays a crucial role to keep their own culture. From fluently speaking the Italian language to growing traditional vegetables, the Bangladeshi immigrants in Venice can be seen as an important example of adaptation in the phase of global environmental change. Finally, the study demonstrated that while taste plays a crucial role in making immigrants' choice of eating vegetables, the perception of healthiness of food and "Bangladeshiness" of vegetables have also a great influence on the choices.

Chapter one

1.1 Introduction

Unlike nutritionists, human societies do not classify their foods in terms of vitamins, proteins, carbohydrates, and so on, nor do they generally measure food consumption in terms of total calorie intake (Greenhalgh et al. 1998). Rather, societies invest a range of symbolic meanings to their foods and associate particular roles and interactions with the preparation, presentation, and consumption of foods. Food reveals what we are, and it is central to our cultural identity (Chowdhury et al. 2000). The sociologist Gary Alan Fine says, "The connection between identity and consumption gives food a leading role in the formation of a community. We use our diet to convey images of public identity. Food choices establish boundaries and borders" (Belasco 1999). Changes in the dietary composition are closely associated with migration and these changes are driven by a range of factors, which include urbanization, economic growth, and new technology (Bhugra & Becker 2005, Kamal, 2018). Immigration can be a situation in which the nutrition transition happens very quickly (Garnweidner 2012). According to Satia-Abouta (2003), 'the process whereby immigrants adopt the host country's dietary practices is called dietary acculturation.' Garnweidner (2012), explains dietary acculturation as multidimensional, dynamic, and complex, that varies considerably depending on a variety of personal, cultural, and environmental characteristics. The long-term process of adaptation to a new culture, where individuals modify certain aspects of their standards, customs, and behavior to uphold a connection to both cultures, is defined as acculturation in Cordero (2010). Bangladeshi ethnic groups efficiently exploit the opportunities in the new environment (Della Puppa & King 2019, Della Puppa 2013). A mutual exchange of ideas and habits between immigrants and the host population takes place over time (Holmboe-Ottesen & Wandel 2012). Like other migrants' groups, Bangladeshi migrants start the exchange with overcoming the challenge of the language barrier, working in the fruit vegetable markets, as roadside vendors and, in restaurants (Ellena et al. 2012, Harney 2007). It

is a bidirectional movement between stages and this behavior is explained by a model according to which "an individual is acquiring, retaining, and relinquishing behaviors and values of his or her original culture and the host culture" (Satia-Abouta, 2003). Many studies have focused on healthy eating and the importance of eating vegetables, whilst there is substantial lack of studies on how traditional (Pieroni et al. (2007), defines traditional as those ingredients that the interviewees knew and/or had been used in their country of origin.) culinary practice of an ethnic group can have diverse implications (Jennings et al. 2014). Thus, the aim of the study is:

1) to record the vegetables eaten among the Bangladeshi immigrants living in Mestre, Venice;

2) to understand what drives the vegetable preferences among them;

3) to evaluate their gastronomic integration based on the perception of eating traditional vegetables.

It is evident from many studies that the food habit and culinary knowledge change with the generation (Ellena et al. 2012). The study will simultaneously cover the barriers and facilitators to healthy eating, and generational perception differences towards ethnic food. To understand why the earliest Bangladeshi entrepreneurs in Italy started selling and eventually growing vegetables it is necessary to understand the Bangladeshi concept of food. Thus, the study aims to document the identity, collection, and frequency of use of traditional food plants among the Bangladeshi immigrants living in Mestre, Venice. According to Pieroni et al. (2007), a better understanding of the health perceptions and beliefs related to the consumption of traditional plant-based foods within South-Asian migrant communities could be very important for offering help to those migrant households that have members affected by the disease like diabetes.

Research questions:

1. If and why eating traditional vegetables is important for the Bangladeshi community in Venice?
2. What are the drivers for the consumption of vegetables in this specific example case?
3. How cultural culinary practice can lead to new ideas regarding agricultural diversity and plant adaptation in the phase of global change?

1.2 Literature review

Evidence that leads to the understanding of how knowledge and practices of eating traditional vegetables change over time and space, and how the cultural importance of plants is shaped within a given community are crucial for answering scientific questions regarding the mechanisms of transmission and use of the of traditional knowledge in the host country (Ghirardini et al. 2007). There has been a growing interest in ethnic minority markets because of their growing size, purchasing power, and geographic concentration (Jamal & Chapman 2000). Migration is the turning point for dietary changes (Terragni et al. 2014). Pieroni et al. (2007), found that while vegetable consumption is considered healthy and a necessity for human health considering the nutritional facts of the vegetables, in the case of Bangladeshis all vegetables are important regardless of their nutritional value. Post-migration choice of eating vegetables among the South-Asian immigrants depends largely on the availability of the traditional vegetables, affordability, and to a very small extent on the medicinal viewpoint and these studies have focused on their food habits, traditional knowledge about medicinal food plants and most importantly the home remedy or traditional ways of treating diabetes and common diseases (Greenhalgh et al. 1998, Larson et al. 2007, Vallianatos & Raine 2008, Ellena et al. 2012). Many studies have also focused on the healthiness of the diet of the immigrants and found out South Asian dietary patterns have been linked to a higher obesity risk (Michimi & Wimberly, 2010, Tiedje et al. 2014, Gilbert & Khokhar 2008). Furthermore, how and why diets change during post-migration, specifically focusing on the changing nature of diets due to the impact of health messages has been discussed in Garnweidner et al. 2012. Jennings et al. (2014) in the study suggests that according to the doctors in the UK Bangladeshi diet is considered unhealthy due to a modest amount of oil and spices and a comparatively low amount of vegetables. In the study concerning healthy eating, Preya et al. (2019), suggests that the traditional outlook of the Bangladeshi society is that, only the fishes, eggs, milk, and meats contain the essential nutrients for the proper functioning of the human body. Thus, many Bangladeshis usually ignore the adequate consumption

of vegetables. Moreover, the study also demonstrates that the richer section of the society also considers that vegetable consumption would not demonstrate their richness. Jennings et al. (2014), further discussed how plants and food from homeland play a crucial role both in homemaking in the Bengali community.

Vegetables don't occupy a large part of the Bangladeshi diet (Ali et al. 2001). However, a study suggests that Bangladeshi vegetables seemed to have high demand in the foreign ethnic market (Hoq et al. 2012). Being popular in the foreign ethnic market perfectly makes sense as migration often causes homesickness and craving for traditional food. In Bangladesh, people are used to eating a wide variety of vegetables, including, cabbage, cauliflower, pumpkin, hyacinth beans, snake beans, and different kinds of tubers (Preya et al. 2019).

In regard to explaining traditional food habit studies have taken a significant interest in 'taste'. The studies of the emic perception of taste in ethnobotany have shown that taste is culturally determined and can strongly influence the use and medicinal perception of the plants (Ghirardini et al. 2007, Jennings et al. 2014, Pieroni et al. 2007). Taste has been defined differently in different studies. Pieroni et al. (2007), discusses the perception of taste according to the bitterness, sweetness, and savouriness of the vegetables and perceived medicinal value and healthiness according to their taste. For instance, bitter taste vegetables are believed to work against diabetes. Taste is a very personal yet culturally defined factor and can be defined by a variety of adjectives, such as tasty, sour, sweet, fresh, etc. for a "good" taste (Sõukand 2016).

Research paths have into the adaptation of migrants to new ecological and cultural environments by analyzing their dietary habits or the domestic uses of food and healthcare plant ingredients (Mellin-Olsen & Wandel 2005). Jennings et al. (2014) argues that Immigrant Bangladeshis have retained to a very high degree their traditional ethnic dietary habits. Any changes made by the British Bangladeshis in her study appeared to be in the form of elaboration of the traditional customs rather than adaptation to the host culture. Ellena et al. (2012) further explains a few exceptions, for example,

pizza, pasta, and hamburger can be found to be mentioned by a minority of the participant as food preference. Whether the new generation, when grown up, will make substantial changes in their food beliefs and behavior, or adopt a few selected Western dishes as an adjunct to their parents' food choices, remains to be seen. In those studies, most of the parents point out their children don't like to eat Bangladeshi food at home, like other second-generation migrants. Research shows little or no change in the style of cooking for instance, grilling and baking are seldom (Greenhalgh et al. 1998) . In summary, adoption appears to be relatively low (Kamal 2018, Holmboe-Ottesen & Wandel 2012). Even though Italy has faced a huge shift in its multicultural mosaic over the last four decades, no extensive research study has addressed the specific issue of the food ingredients used, changed, or manipulated within the domestic arena of migrants, with only the exception of a few occasional field studies (Ellena et al., 2012, Fontefrancesco et al. 2019). However, in recent years, an increasing number of studies and reviews have recorded food ethnobotanical knowledge in Italy, Turkey, and Europe (Ellena et al., 2012).

1.3 Bangladeshi immigrants living in Italy

Historical background

Bangladeshis have a long history of migration since the pre-colonial period (Del Franco 2010). Among many other migration destinations in Europe, the UK was traditionally and still is recognized as the highest destination for Bangladeshi migrants (Della Puppa 2013, Siddiqui 2003). However, Italy has recently arisen as a popular destination for Bangladeshi migrants (Knights 1996, Morad and Gombač 2015, Morad and Gombač 2018). As research has shown, Bangladeshi migrants started to arrive in Italy in the late 1980s, but the numbers increased from the early 1990s on (International organization of Migration, 2017, Knights & King 1997). The statistics regarding immigrants in Italy tell an interesting story. In 1995 there were 5,541 Bangladeshis officially present in Italy (Knights & King 1997). Bangladeshis are the 5th-largest non-European community in Italy, with 122,428 members making the sixth-largest non-European community in the Province of Padova (a city in the

Veneto region in Italy), with 1,661 individuals out of 95,083 foreign residents (Morad and Gombač 2018). This is also a consequence of the Mediterranean route, which leads through Italy and other Mediterranean countries (figure 1), being one of the most important routes to the European Union (Della Puppa & King 2019, Della Puppa 2013). Most of the studies about Bangladeshi immigrants have been conducted in large cities that have a relatively long tradition of hosting Bangladeshi communities, such as Rome, Vicenza, and Venice. It is stated in Knights 1996, that the majority of Bangladeshis in Italy lived in Rome. However, the data show that in recent years their presence can also be documented and observed in southern, central, north-eastern, and north-western Italy (Morad & Gombač 2018).

Once Bangladeshi migrants successfully obtained their residence permits and settled in major Italian cities such as Rome and Milan, some of them start to move to other urban centres (Morad and Gombač 2018). Several "Bangla towns" have been established in different areas of the country (Della Puppa 2013). The industrial development in the northern part of the country stimulates the internal migration towards better social conditions, employment, and expected income (Harney 2007). According to the Italian Institute of Statistics these days the region has the highest percentage of foreigners in Italy and in 2016, there were 5,047,028 migrants living in Italy and nearly 10 percent of them were living in Veneto. The onward migrations within Europe especially in Italy that have a large number of immigrants are driven by several motives. Firstly, overcoming barriers to employment and career progression, diaspora-related motives, for example, joining relatives, friends and larger co-ethnic communities, educational opportunities, including improving the education and life chances of children, social, political and cultural reasons, and finally, get a better life which is impossible to have by doing the same kind of work in Bangladesh (Harney 2006, Del Franco 2010, Siddiqui 2003). Participants of the studies often mention that they haven't been to Bangladesh for more than 10 years, but they still feel at home as all their family members are in Italy (Pieroni & Torry 2010). They imply residing in Italy as an environment where you can feel at home and live in accordance with Bengali culture and lifestyle (Della Puppa & King 2019).

Figure 1 Study area and the routes through which immigrants reach Italy

(Source: https://commons.wikimedia.org/wiki/File:World_Map_Blank_-_with_blue_sea.svg)

The map in the figure shows the possible routes through which Bangladeshis reach Italy. The immigrants who came to Italy before 2000 were mostly irregular; entered Italy using more than one irregular route, a combination of 'air and land' or 'air and sea', or 'air, sea, and land' routes. They either obtain a tourist visa labor visa from Dubai and other Middle Eastern countries where they lived for work a few years. The most preferred transit is Hungary and Germany. They entered Italy also from France and Greece. After 2000 the flow of undocumented migrants diminished but did not disappear (Morad & Gombač 2018).

Sociocultural and economic background

Various definition of transnationalism has been suggested by sociological and anthropological research. Nonetheless, Morad and Gombač (2018) suggested the broadly cited definition of this

concept which is “the process by which immigrants forge and sustain simultaneous multi-standard social relations that link together their societies of origin and settlement”. Social and cultural activities play a key role when considering the transnational ways of belonging to the homeland. According to Della Puppa & King (2019) the term “ways of belonging” implies practices that indicate a conscious connection between a specific migrant group and their country of origin. The establishment of Bangladeshi associations, mainly homeland-based ones, are aimed at the preservation, expression, and transmission of Bangladeshi culture. Inevitably, their main activities involve the celebration of all Bangladeshi national days, for instance, the International Mother Language Day, Independence Day, and Victory Day (Della Puppa & King 2019, Morad & Della Puppa 2019). They also celebrate Bengali New Year, which is observed in Bangladesh at the start of the summer season. These activities serve the purpose of shaping ethnic awareness and promote a Bangladeshi cultural identity (Harney 2007). In addition to that some associations also work as transnational actors by maintaining various links that include mobilizing and transferring financial capital, resources and knowledge in order to provide donations and rehabilitation following a natural disaster or any other kind of emergency. The associations also provide regular support to several sectors, such as health, education and infrastructure development in their national villages and towns of origin (Morad & Della Puppa, 2019, Della Puppa 2015). They create a new sense of community by operating these services. Some studies have demonstrated the economic condition of the Bangladeshi immigrants living in Italy. Most of them suggest that Bangladeshis were employed as factory workers, chefs, waiters in restaurants and, some sold fruit and vegetables at market stalls. Street hawkers are also a prominent feature in cities like Padova, Milan, etc. They sell flowers, toys, jewelry, souvenirs, handbags, umbrellas, and tourism materials on the streets (Harney 2006). These street merchants work seasonally. Many of them are owners of clothing, vegetable, and fruit shops. Besides that, a number of people also run pizza kebab shops and, Bangla food shops. Bangladeshi spices, vegetables, fish, fruits, sweets, snacks, halal meat, and some other necessary ethnic food items are readily available in these shops (Harney 2007, Della Puppa 2013).

Studies related to Bangladeshi immigrants' life and community show that most immigrants don't have high education. Most of the first-generation migrants either have high school degrees from Bangladesh or school dropouts (Morad & Della Puppa 2019) and they have the feeling of stepping down in their occupations and activities compared to their situation in Bangladesh. The immigrants had their own business in their country of origin, but they are working now for someone else as manual laborers (Zeitlyn 2006). Morad & Gombac (2018), suggests that some of the earlier migrants to Padova were very successful in setting up businesses or finding relatively permanent jobs in the factories like Fincantieri or shipbuilding. However, now most of the workers in the factories, shops, stalls, and restaurants are in a more precarious position. As the number of migrants is growing day by day it is very difficult for newcomers to establish themselves and find a good and stable job in order to be able to fulfill their migration aspirations. Street vending, which was traditionally considered one of the possible survival strategies by Bangladeshi migrants, has also become very competitive due to the growing number of newcomers and unemployed (Harney, 2007).

Chapter two

Data and Method

2.1 Study area

Mestre is a former north-western suburb of Venice in the Veneto region of northern Italy. Mestre is located on the mainland shore of the Venice Lagoon and it is now administratively part of the city of Venice. It existed in Roman times and was the site of an important fortress in the 12th century. It came under Venetian domination in 1337 and was incorporated into the commune of Venice in 1926. It is connected to Venice by a 3.8 km long railway and Ponte della Libertà road bridge over the lagoon. Mestre had a fast and disorganized period of urban growth after World War II and it became the hub and the most populated area of the mainland (Encyclopaedia Britannica 2013, Mestre Castelnuovo).

2.2 Methodology

Throughout October 2019 to January 2020, I conducted interviews with 30 Bangladeshi adults living in Mestre, the densely populated city in the Veneto region of Italy. I interviewed 10 (male) sellers, and an equal number of male and female consumers (n=20, 50% male and 50% female) in a neighbourhood in the central part of Mestre. I chose it specifically because it contains the wide-open vegetable and fish market and most of the Bangladeshi immigrants can be found there as it is the best place to get fresh fruits, fish, and vegetables. A good number of shops in the open market are run by Bangladeshi immigrants. The remaining shops are run by Italians but most of the Italian shops have one or more Bangladeshi employees in their shops. However, in Mestre, there are many alimentary shops that are also run by Bangladeshi immigrants. The sellers I interviewed were both from the alimentary shop and the open market. During the interviews, I had the opportunity to speak with two

growers. In my research, I conducted all the interviews with the first-generation migrants of different ages (table 1). I walked up to random strangers on the streets and inside shops. Most of them agreed to speak to me after I explained the purpose of my research. The majority of my male informants were eager to talk; however, the women were not as willing to talk. In order to gain access to Bengali women, I was initially suggested to go to the alimentary school and to the language school (referred to as Venice-Bangla School) that is run by Bangladeshis to teach the Bengali language to the children. But most of the time they were in a rush or didn't want to talk. The women were accessible for interviews only when they were found doing grocery in the open market or the alimentary shops.

Table 1 Informants information table

Code	Age (approximate)	Gender	Time of migration/ time in Italy	Category (Consumer/seller/grower)
CF01	Early 30's	Female	Didn't mention	Consumer
CF02	Mid 50's	Female	Since 2015	Consumer
CF03	Late 30's	Female	Did not mention	Consumer
CF04	Mid 50's	Female	Since 2008	Consumer
CF05	Early 50's	Female	Since 2006	Consumer
CF06	Mid 30's	Female	Since 2019	Consumer
CF07	Early 40's	Female	Didn't mention	Consumer
CF08	Mid 50's	Female	Since 2013	Consumer
CF09	Early 20's	Female	Since 2019	Consumer
CF10	Mid 20's	Female	Since 2017	Consumer

CM01	Mid 50’s	Male	Didn’t mention	Consumer
CM02	Mid 50’s	Male	Since 2009	Consumer
CM03	Early 20’s	Male	Didn’t mention	Consumer
CM04	Early 30’s	Male	Didn’t mention	Consumer
CM05	Early 50’s	Male	Didn’t mention	Consumer
CM06	Early 40’s	Male	Since 2010	Consumer
CM07	Early 50’s	Male	Didn’t mention	Consumer
CM08	Late 20’s	Male	Didn’t mention	Consumer
CM09	Late 50’s	Male	Since 1983	Consumer
CM10	Early 20’s	Male	Didn’t mention	Consumer
SM01	Early 30’s	Male	Since 2010	Seller
SM02	Early 30’s	Male	Didn’t mention	Seller
SM03	Early 50’s	Male	Didn’t mention	Seller
SM04	Late 40’s	Male	Since 2015	Seller
SM05	Late 40’s	Male	Since 2009	Seller

SM06	Mid 30's	Male	Didn't mention	Seller
SM07	Mid 30's	Male	Didn't mention	Seller
SM08	Mid 30's	Male	Didn't mention	Seller
SM09	Late 30's	Male	Didn't mention	Seller
SM10	Early 40's	Male	Since 2014	Seller

2.1.1 Data collection:

No personal information was asked during the interviews. During the interviews, notes were taken, and whenever possible audio recordings were made with the permission of the interviewees. The interviews covered the following topics: food and traditional vegetables, culinary practices, health beliefs, therapeutic plants, and generational change (see appendix). The interviews lasted between thirty minutes and an hour each. Botanical nomenclature was done by following 'The Plant List database' (The Plant List 2013), while the family assignments adhered to the Angiosperm Phylogeny Group standards (Stevens 2017).

Participants were asked at the beginning of the semi-structured interviews to free-list traditional vegetables they use in their daily cuisine (appendix 1). For each named item, I asked for details of how the food is prepared, its frequency of use, taste, perceived healthiness, and (eventual) medicinal properties. The sellers provided information about the health and medicinal values when they were asked if any Bangladeshi look for vegetables that they believe to have a cure for a particular health problem. They were also asked to provided information regarding their own dietary pattern and how

it has changed, specifically considering vegetables exactly as the individual consumers (appendix 2). All interviewees were given sufficient space for the elaboration of the topic, in order to capture their perceptions and understandings from the grassroots perspective. All interviews were done in Bengali, which I translated later to English.

2.2.2 Quantitative analysis

For the quantitative analysis, the data from the recordings were coded and entered into a Microsoft Excel database in order to determine the proportions of different variables such as the most used plant species, health perceptions, and different uses. These results were analyzed descriptively and comparatively. Relative frequency of citation (RFC) was analyzed to determine the well-known and most used species among the Bangladeshi immigrants. Relative frequency of citation shows the local importance of each species and is obtained by dividing the number of informants who mention the use of the species, also known as the Frequency Citation (FC), by the total number of informants participating in the survey (N): RFC = FC/N ($0 < RFC < 1$) (Skalli et al. 2019).

The Use Value (UV) of each species was calculated according to the formula:

$UV = \sum Ui/n$, where: Ui = the number of uses mentioned by each informant for a given species, n = the total number of informants. “For example, if informant X mentioned 7 uses for species a, and informant Y mentioned 3 uses for the same species, the UV of species a would, therefore, be 5, (7+3) uses mentioned divided by 2 informants. As such, the Use-Value of a given plant is determined by the number of uses locally attributed to it in relation to the number of informants” (Shaheen et al. 2015).

2.2.3 Qualitative analysis

The qualitative analysis started by transcribing the interview and repeated reading for a preliminary understanding of the keywords. Later all selected interview transcripts were entered into RQDA

software (Huang 2010). A code list was developed on the basis of the content analysis of subjects and emphasis the respondents used during describing the consumption of the traditional vegetables. In most of the cases, one response was attributed to several codes, as in one sentence several statements were presented (Sõukand & Kalle 2015). Codes were farther categorized, and selected code categories plotted in order to understand the main uses and reasons to consume traditional vegetables.

Initially, as many different keywords as possible were considered while coding the content to cover all potential attitudes towards the use of traditional vegetables from a free discussion on the subject. However, it was important to reduce the number of analysis units, as much as possible, in order to organize and analyze the results. Although during the initial stage the keywords were taken from the interviewee's narration, in the final stage some keywords were modified accordingly whenever there was potential overlapping. Overall 22 keywords were obtained from the inscribed interviews through textual analysis. These codes were obtained through careful analysis to avoid repetitive keywords with similar meanings. All the keywords were further divided into four major categories which are, **availability** of the traditional vegetables, **health benefits and special medical applications** of the vegetables described by the informants, **cultural importance,** and **taste**. Four keywords were put under the category 'availability'. The logic behind choosing the category is, this category appeared many times during the interviews. Above 80% of the participants mentioned the availability of the vegetables. The keywords, greenhouse, grown seasonally, imported appeared many times while describing the availability of the traditional vegetables. During the interviews the sellers mentioned which vegetables are profitable and grows well to balance the supply and demand. 9 codes were assigned under the category "health benefits and special medical application". Fresh quality, healthy, blood purification, joint pain is some of the codes assigned under this category. Around 60% of the informant mentioned the health benefits of vegetables according to their perceived knowledge. Taste and cultural importance are two categories that include 4 codes each. Food use, demand, habit, cooking pattern are the codes assigned under the category "cultural importance". These codes were used by around 80% of the participants. Lastly, the category "taste" was used to describe why eating

traditional vegetables is important. Bland taste, better taste, taste of home through which the informants explained their thoughts. All the participant described ‘taste’ many times during the interviews. Selling and growing vegetables has become an important activity among the Bangladeshi community. The great commercial importance of the traditional vegetables has been described in section 3.3.

2.2.4 Limitations of the study

The study for the most part can be sufficiently useful to clear different ideas regarding the eating habit, what drives the dietary pattern, the substantial changes that happen after migration, and in-depth understanding of the food choice that eventually sheds light on the health perception of Bangladeshi diaspora in Venice. Although the study points out several important factors like agricultural and plant diversity, this study has few limitations. The first limitation is the lack of information about traditional vegetables growing in Venice. Due to COVID19, it was not possible to conduct more interviews with the growers; The second limitation is the description of food choice of the second-generation migrants are based on what the informants said and literature review. No interviews were conducted with the second-generation migrants.

Chapter three

Result

3.1 Traditional vegetables

Table 2 reports all the recorded vegetables, together with the vernacular names that are known among the Bangladeshi migrant community in Venice, their botanical Latin names, the parts of the plant that are used in the kitchen, their most common culinary preparations as quoted by at least five informants, their relative frequency of citation and their use value (based on the average of the quotes given by all the informants), and information about whether the vegetables are grown or imported in Italy. Most of the recorded vegetables are consumed fresh or cooked with vegetable oil and in the presence of a variety of different spices. 27% of the vegetables sold by the Bangladeshis were called by Italian names. In this 27%, 4 taxa are traditional Bangladeshi and the others are Italian, the rest were called using the local name of the vegetables (table 2).

During the explorative survey 59 plant taxa have been recorded belonging to 15 botanical families. The families with most plant taxa used included Cucurbitaceae with 12 taxa followed by Brassicaceae with 8 taxa, Solanaceae with 5 taxa, Araceae, Leguminosae & Apiaceae with 4 taxa each, Amaranthaceae & Amaryllidaceae with 3 taxa, rest of the families were represented with 1 taxon each. The RFC of the encountered plant taxa varied from 0.01 to 1. 18 plant taxa have the highest relative frequency of citation. They were mentioned by all the 30 participants. The average number of Use value categories in the sample was 1.51, the maximum use-value is 4, and the minimum use-value is 0.03. *Lagenaria siceraria* and *Capsicum baccatum* L. are the highly important plants with Use-Value 4, *Spinacia oleracea* L., *Momordica charantia* L., *Coriandrum sativum* L., are the second important plant taxa with Use-Value 3.

Table 2 Traditional vegetables commonly consumed and sold by Bangladeshi immigrants in Venice.

Scientific Name, Family name	**Local Name**	**Used parts**	**Preparation**	**FC**	**RFC=FC/N**	**Uvs=SumUi/ni**	**Grown/Imported**
Abelmoschus esculentus (L.) Moench Malvaceae	Dhedosh[TB]	fruit	cooked	30	1	2	G
Allium cepa L. Amaryllidaceae	Piyaj[TB]	Leaves, root	Cooked, fresh	30	1	2	G
Allium cepa L. Amaryllidaceae	Cipola tropea[IV]	root	Fresh, cooked	7	0.23	0.27	
Allium sativum L. Amaryllidaceae	Rosun[TB]	root	cooked	30	1	2	G
Amaranthus gangeticus L. Amaranthaceae	Lalshak[TB]	leaves	cooked	21	0.7	1.7	G
Amaranthus lividus L. Amaranthaceae	Data[TB]	leaves, stem	cooked	22	0.73	1.73	G
Amorphophallus campanulatus Decne. Araceae	Olkachu[TB]	root	cooked	6	0.2	0.2	G
Apium graveolens L**.** Apiaceae	Accia[IV]	stem	cooked	5	0.17	0.17	G

Basella alba L. Basellaceae	Puishak[TB] (sabuj)	leaves	cooked	30	1	2	I
*Benincasa hispida (*Thunb.) Cogn. Cucurbitaceae	Chal kumda[TB]	Flower, fruit, leaf	cooked	26	0.87	1.73	G
Beta vulgaris L. Amaranthaceae	Bieta[IV]	leaves	cooked	24	0.8	1.83	G
Brassica campestris L. Brassicaceae	Sarisa shak[TB]	leaves	cooked	18	0.6	1.2	I
Brassica oleracea var. capitata L. Brassicaceae	Badhakopi[IV]	leaves	Cooked, fresh	30	1	2	G
Brassica oleracea var. botrytis L. Brassicaceae	Fulkopi[IV]	flower	Cooked	30	2	2	G
Brassica oleracea var. sabauda L. Brassicaceae	Verza [IV]	leaves	Fresh	1	0.03	0.03	G
Brassica oleracea var. italica Plenck Brassicaceae	Broccolo [I, B]	fruit	cooked	30	1	2	G
Brassica rapa L. Brassicaceae	Shalgom[TB]	root	cooked	9	0.3	0.47	G
Brassica ruvo L.H.Bailey Brassicaceae	Cime di rapa [IV]	leaves	fresh	12	0.4	0.8	I

Capsicum annuum L. Brassicaceae	Misti marich [I, B]	fruit	Fresh, cooked	16	0.53	1.01	G
Capsicum baccatum L. Solanaceae	Jhal marich[TB]	fruit	Fresh, cooked	30	1	4	G, I
Carica papaya L. Caricaceae	Pepe[TB]	fruit	Fresh, cooked	18	0.6	1.33	G
Chenopodium album L. Chenopodiaceae	Bathua[TB]	leaves	cooked	7	0.23	0.4	G, I
Cichorium intybus L. Compositae	Cicoria[Iv]	Leaves	cooked	14	0.47	0.83	G
Citrus aurantiifolia (Christm.) Swingle. Rutaceae	Kagoji Lebu[TB]	fruit	fresh	11	0.37	1.1	G, I
Colocasia esculenta (L.) Schott. Araceae	Kochur loti[TB]	root	cooked	25	0.83	1.83	G, I
Colocasia esculenta (L.) Schott, Araceae	Mukhikachu[TB]	root	cooked	28	0.93	1.87	G
Corchorus capsularis L. Malvaceae	Patpata[TB]	leaf	cooked	22	0.73	1.47	G, I
Coriandrum sativum L. Apiaceae	Dhone pata[TB]	leaves	Cooked, fresh	30	1	3	G, I
Cucumis sativus L. Cucurbitaceae	Shasa[I, B]	fruit	fresh	18	0.6	1.2	G

Cucumis sativus L. Cucurbitaceae	Khira[TB]	fruit	fresh	17	0.57	1.13	I
Cucumis melo L. Cucurbitaceae	Futi[TB]	corm	cooked	25	0.83	1.67	I
Cucurbita maxima Duch esne. Cucurbitaceae	Misti kumra [I, B]	Flower, fruit, leaf	cooked	30	1	2	G, I
Cucurbita pepo L. Cucurbitaceae	zucchini [I, B]	fruit	cooked	30	2	2	I
Cynara scolymus L. Compositae	Carciofo[IV]	leaves	cooked	6	0.2	0.2	G
Daucus carota L. Apiaceae	Carrota [I, B]	root	Cooked, fresh	30	1	2	G
Foeniculum vulgare Mill Apiaceae.	Finocchio[IV]	root	Cooked, fresh	12	0.4	0.47	G, I
Ipomoea 27quatic Forssk Convolvualceae	Kolmi[TB]	leaf	cooked	19	0.63	1.27	G, I
Lablab purpureus L. Leguminosae	Sheem[TB]	fruits	Cooked, Eaten as a side with rice	30	1	2	G
Lactuca sativa L. Compositeae	Lettuce[IV]	leaves	fresh	15	0.5	1.5	G, I

Lagenaria siceraria (Molina) Stabdl. Cucurbitaceae	Lau[TB]	Flower, fruit, leaf	cooked	30	1	4	I
Luffa cylindrica (L.) M.Roem. Cucurbitaceae	Dhundul[TB]	fruit	cooked	19	0.63	1.27	G, I
Lycopersicon esculentum Mill. Solanaceae	Tomato[I, B]	fruit	Fresh, cooked	30	1	2	I
Manihot esculenta Crantz. Euphorbiaceae	Shimul alu[TB]	tuber	cooked	8	0.27	0.53	G
Momordica charantia L. Cucurbitaceae	Ucche/Karala[IV]	fruit	Juice, cooked	20	0.67	3	G, I
Momordica cochinchinensis (Lour.) Spreng. Cucurbitaceae	Kakrol[TB]	fruit	cooked	15	0.5	1	G
Moringa oleifera Lam. Moringaceae	Shajina[TB]	fruit	cooked	20	0.67	1.33	G
Musa × *paradisiaca* L. Musaceae	Kanchkala[TB]	fruit	cooked	30	2	2	G, I
Nasturtium officinale R. Br. Brassicaceae	Helencha[TB]	leaves	cooked	7	0.23	0.23	G

Phaseolus vulgaris L. Leguminosae	Fagioloni[IV]	fruit	cooked	14	0.47	0.93	G
Pisum sativum L. Leguminosae	Taccole[IV]	fruit	cooked	1	0.03	0.033	G
Raphanus raphanistrum L. Brassicaceae	Mula[TB]	root	Fresh, cooked	25	0.83	2.17	G
Solanum melongena L. Solanaceae	Begoon[I, B]	fruit	cooked	30	1	2	G
Solanum tuberosum L. Solanaceae	Alu[IV]	tuber	cooked	20	0.67	1.33	G
Spinacia oleracea L. Chenopodiaceae	Palonggshak[TB]	leaves	cooked	30	1	3	G
Trichosanthes anguina L. Cucurbitaceae	Chichingga[TB]	fruit	cooked	15	0.5	1	G, I
Trichosanthes dioica Roxb. Cucurbitaceae	Patal[TB]	fruit	cooked	20	0.67	1.33	G, I
Vigna unguiculata L. Leguminosae	Barbati[TB]	fruits	Cooked, Eaten as a side with rice	29	0.97	1.93	G
Xanthosoma sagittifolium (L.) Schott. Araceae	Dudkachu[TB]	root	cooked	8	0.27	0.27	I

Zingiber officinale Rosco e. Zingiberaceae	Ada[I, B]	root	Cooked, fresh	30	1	2	G

(Abbreviations: TB= traditional Bangladeshi vegetables, IV= Italian vegetable, I, B= Italian, Bangladeshi)

Table 1 shows 26 taxa that are cultivated in Italy by Bangladeshi (44%), 9 imported taxa (15%), 13 taxa were both imported and grown in Italy (22%) and 11 plant species that are brought in the Italian retail market (19%).

Okra (*Abelmoschus esculentus* (L.) Moench,), eggplant (*Solanum melongena* L.), pumpkin (*Cucurbita maxima* Duchesne,), bottle gourd (*Lagenaria siceraria* (Molina) Standl.), Indian spinach (*Solanum tuberosum* L.), radish (*Raphanus raphanistrum* L.) represented some of the most cited vegetables with 100% frequency of quotation. Zucchini and broccoli were mentioned by more than 15 consumers which are considered to be Italian vegetables by Bangladeshis. Overall the most cited species were traditional vegetables that the immigrants have known and eaten their whole life. These vegetables are regularly used in their culinary practice.

3.2 Perception

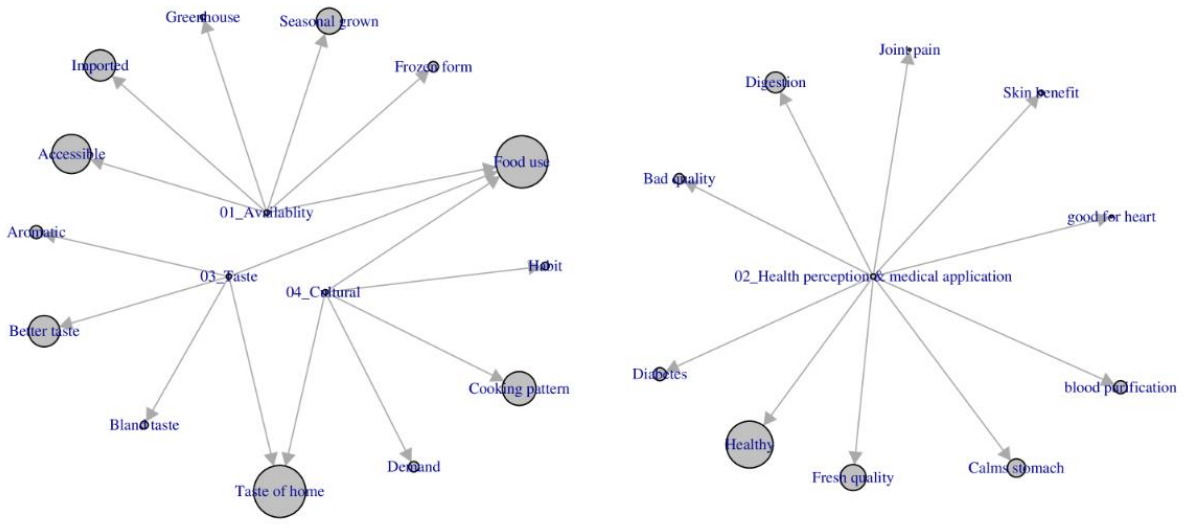

Figure 2 Plot of four complementing themes covered when the popular concepts of traditional vegetables is explained. Plotting conducted in RQDA software (Huang 2010), using Fruchterman-Reingold layout

Figure 2 visualizes the relations between the codes and the categories. From the figure, it can be seen that some codes are belonging to only one category whereas, some codes are belonging to several code categories. For example, 'food use' comes under three categories, and 'taste of home' comes under 2 categories. 'Health perception and special medical application' includes all the codes that are related to health and medicine. The circle size represents the percent of quotation of the particular code. The above-mentioned categorization of the codes reflects the overall finding of the research. They are further discussed in the later parts of this chapter with a broad view.

3.2.1 Availability

Availability is one of the major determinants of consuming traditional vegetables, and this was also the most discussed subject addressed by the informants. During the early settlement (around 1980), the traditional vegetables were not available in Venice. The availability increased with the increasing number of Bangladeshi immigrants. *"We have been selling Bangladeshi vegetables for 4 to 5 years, before that we used to sell fruits"* [SM04]. Accessibility is another factor to consider. Bangladeshi vegetables are sold only by the Bangladeshi sellers either in the mini-market or in the open market run by Bangladeshis. The sellers are well aware of the demand for Bangladeshi vegetables. Thus, the vegetables are quite accessible. Growing Bangladeshi vegetables in Venice maintained the balance between supply and demand of traditional vegetables, consequently the availability and accessibility. Those that are not grown are imported. All the informants mentioned that traditional vegetables are always available. Availability also depends on the growing season and price fluctuation depending on the season. In this regard, one informant (CF02) stated: *"I like 'kochur loti' a lot. When I first came to Italy, I couldn't find 'loti (Colocasia esculenta* L.*)' here. But now they are grown here. Now I don't miss any vegetables here. We also buy the frozen Bangladeshi vegetables, like, data. In the winter we don't get data (Amaranthus lividus* L.*)."* Green chilies, bottle gourd, eggplants, okra are the species that are available all year round. They are grown both in the season and outside the season using greenhouses. *"Now we are selling Bangladeshi vegetables grown in Italy. But when the season*

is over, we start importing, mostly we import papaya, green chili, pointed gourd, drumstick, okra etc. People look for green papaya." [SM06]

Moreover, Steam Amaranth, pointed gourd, taro is the vegetables that are available in frozen form. Participant SM02 pointed out that he started working in a fruit shop owned by a Bangladeshi. Soon the search for vegetables like taro, drumstick, pointed gourd, bottle gourd, etc. increased with the increasing size of the Bengali community. Very similar kind of species are available in the Chinese grocery stores, but the demand was only for the Bangladeshi grown. *"We sell Bangladeshi vegetables because there are a lot of Bangladeshi people here and they look for Bangladeshi vegetables"* [SM05]. These pushed the import of Bangladeshi vegetables and with time it became a great priority to be well supplied with traditional vegetables. Many immigrants started bringing seeds of the vegetables just for small experiments with no agricultural background and out of curiosity. As mentioned by the growers for some of them it became a great success and they started growing vegetables and became the retailer. Some started selling traditional vegetables alongside fruits and Italian vegetables. They extended their production by incorporating the greenhouses to produce vegetables. This step kept the availability of the vegetables flowing. *"Few growers own 5 to 6 greenhouses and in winter they grow cilantro, green chili, and few more vegetables in the greenhouse, the greenhouse has made it easy to access the vegetables all year round"* [SM05]

10 informants however stressed the point that they try to avoid the imported vegetables because of high preservative (formaldehyde) content, and they were particularly conscious about the vegetable freshness. They pointed out that by the time the imported vegetables reach Italy they are close to dead. *"We try to avoid the imported vegetables because of the quality. They use a lot of chemical to preserve the vegetables and by the time it arrives in Italy the quality degrades even more"* [CF01]. Growing season is crucial to meet the constant supply of the vegetables. Participant CF05 stated that green chili is an essential part of her cooking. She buys green chilies in bulk and stores them in the freezer, so she can use them when the price is high. Even though the price is high, greenhouse and

import keep the vegetable's availability. Same attitude applies for bitter gourd, which is also bought in bulk and stored in the freezer to be preserved for a long time.

Figure 3 Pictures of vegetables taken during the interview (Bottle gourd, string bean, bitter gourd, etc.)

3.2.2 Taste

SM03 stated: *"emon deshti kothao khuje pabe nako tumi"*. This idiom is symbolic of the Bengali identity, encompassing both the culture and the food and it means you can't find the taste nowhere in the world but Bangladesh. When I asked him why eating Bangladeshi vegetables is important for him, he immediately replied to my question with that idiom.

"Why Bangladeshi vegetables? No other vegetables can replace the taste of Bangladeshi vegetables was the reply from all the 20 participants which I took as consumers. *"Today I bought piaj pata (spring onion). It is only for me, no one in my family likes it. My mother used to make it",* participant CF05 mentioned expressing the taste of home and how she kept the traditional culinary practice. Some uncommon food plants were also listed such as drumstick (*Moringa oleifera*), cassava (*Manihot esculenta* Crantz), spar lime (*Citrus aurantiifolia (Christm.)* Swingle). Most of the recorded vegetables are still very frequently consumed in Bangladeshi migrant households. While asked about vegetables, all the participants made the list of vegetables they eat and sell. Some pointed them in the store. It came to me as no surprise that all the listed vegetables were Bangladeshi except for a few Italian ones. However, they mentioned Italian vegetables only when asked. That gave me an initial clear view that Bangladeshi immigrants prefer to eat traditional vegetables rather than Italian ones. "*We eat vegetables because it is mandatory for a Bangladeshi to keep vegetables in their daily meal. I can't say anything from the medical point of view, but I have eaten vegetables all my life, and it became a habit"*. [CM05]

A negligible amount of Italian vegetables got priority in their diet, for instance, cauliflower, broccoli, zucchini, and eggplants, which they are familiar with from Bangladesh. It is worth to mention that, even though Italian eggplants were consumed, they grew the Bangladeshi eggplants in Italy. They are believed to have a taste difference. *"I keep 'Bangla piaj' (onion), 'Bangla ada' (garlic) in my shop. The 'Bangla piaj' are very aromatic and it tastes very good"* [SM01]. Few Italian vegetables for example, spinach, bieta, and chicory were described to be famous among Bangladeshi immigrants.

From plenty of listed vegetables, not a large number got a place for consumption. The initial understanding is that it is the taste of the vegetables why Bangladeshis are consuming vegetables. The participant didn't mention a sweet, sour, or bitter taste, but the taste of 'home'. Two vegetables that were particularly popular for their taste are teasel gourd and pointed gourd. They don't grow in Italy, but their demand doesn't lessen, and they are imported in the season. "*I came to Italy nine months ago, but I can't eat anything here. I always go to buy Bangladeshi vegetables in the local Bangladeshi shops"* [CF06]. CF06 further mentioned that her husband eats everything (all vegetables), but she was not able to cope with the new food as she found them tasteless. Informant CF04 mentioned the spur lime (kagji lebu), that don't grow in Italy, but they keep looking for that. This is the only vegetable that can give the taste of Bangladesh. One lemon can cost 1.40 to 2euros. *"My son likes to eat Bangladeshi vegetables. His favorite is rice, lentil, and fish. For better taste, he always asks for kagji lebu, the lemon that has a unique fragrance"* [CF04]. Few informants mentioned changes in their dietary pattern, yet at least a Bangla meal at the end of the day is a must. *"I work all day; I eat sandwiches or pasta for lunch. But for dinner, we must eat rice with vegetables and fish or meat"* [CM08].

Comparison of the taste of Bangladeshi grown and Italian grown vegetables

"The taste of Bangladeshi grown vegetables is not comparable to the Italian grown. We may get everything in Italy, but the same taste cannot be found in the Italian grown" replied informant CM05 when asked about how the taste of Bangladeshi grown vegetables compares with the Italian grown. Around 80% of the participants said that the soil and temperature make a large difference, but the quality of the vegetables is better in Italy. Most of the vegetables are grown in Chioggia and Favaro, where there is enough supply of water. *"The soil in Chioggia is suitable for growing Bangladeshi vegetables. It can retain enough moisture"* [SM03]. In Italy, mostly organic fertilizer and some urea fertilizer are used, but the balance is better than in Bangladesh which ensures the quality of the

vegetables as mentioned by SM07. Some informants think on the contrary. They argue that the Italian grown taste the same as the Bangladeshi grown. Female informants were particularly picky about the vegetables. CF06 and CF08 said Italian vegetables taste bland.

3.2.3 Health and medicinal perception

"My friend cooked rice and he shallow fried some 'spinachi' (spinach) for me with the onion still raw. It was very fresh and healthy. I always eat vegetables to maintain my health. It is very good for our blood circulation. We have 'vegana' (vegan) dishes in the hotel. I cook it with very light olive oil, sometimes just boil the vegetables and fry it lightly in the olive oil and 'pepe nero' (black pepper). It is so much healthier and tastes good."

I got the above-mentioned answer from informant CM04 when I asked about healthy eating. Although the informant didn't, mention eating vegetables for a particular health benefit, over 90% of the participants said all the vegetables are good for health in general. *"Vegetables are medicine. I eat a lot more vegetables than I used to eat in Bangladesh"* [SM06].

Some (8 informants) tried to explain that some vegetables are good for digestion, some for blood circulation, and some (2 informants) for skin benefits. Keeping vegetables is a part of their daily meal. Bottle gourd and radish are well known for their capacity to help in digestion and calming the stomach. The majority of the participants reported that using too much red chili powder causes the gastric problem, but green chili doesn't cause the problem. *"my husband doesn't allow me to buy red chili powder, it causes problem in digestion"* [CF09]. Participants mentioned they have completely excluded red chilies even for cooking meat. *"we don't use red chili powder anymore. I even cook beef curry with green chili"* [CF07]. This statement gives the idea that red chili powder could be essential for cooking beef curry, but it seemed like the participant preferred the health benefit over the taste. Informant CF04 even mentioned that green chili is good for the heart.

Spinach was one of the most quoted (100%) vegetables that are consumed by all the participants and believe to be very healthy and have blood purifying capacity. According to informant SM05, spinach with the roots are healthier than spinach leaves. Another frequently mentioned vegetable is Indian Spinach ('puishakh') which also believed to have blood purifying capacity. Informant SM01 mentioned, beet (bieta) and chicory are two Italian vegetables that are very famous among Bangladeshi women. They believe these vegetables have skin benefits. He also stated that bottle gourd is very good for pregnant women. CM06 stated, *"Papaya is very good for stomach and it has benefits for joint pain."* While asked medicinal perception 5 informants mentioned bitter melon can work as a cure for diabetes and one informant said it is good for skin disease. Only one participant (SM05) pointed out that fennel works as a medicine and one could eat it raw or cooked. His suggestion for me was: *"if you have a stomach problem, eat a few pieces of fennel and you will instantly feel better"*. Fennel is considered a foreign vegetable among the Bangladeshi migrants. But not many participants mentioned fennel. 7 of them mentioned lemon as a solution for problems like cough and cold. According to CF09: *"my mother always suggests me to drink lemon or ginger tea whenever I get a cold"*

The quality and freshness also determine the healthiness of traditional vegetables. The handling of the vegetables occupies great importance and it is one of the reasons why Bangladeshi vegetables are popular only among Bangladeshis, Chinese, Philippines, and few Middle Eastern countries as they have a very similar cultural background. As discussed previously the imported vegetables that come from Bangladesh contain a high amount of chemical fertilizers that are considered poisonous by the Bangladeshi immigrants. *"Now we use only olive oil for cooking. Bangladeshi oil is a very bad quality. I have gained weight, but I don't feel tired because of my weight. Here we get almost all kinds of vegetables. The quality is very good. They don't contain any poisonous chemical like the one grows in Bangladesh."* [CM07]

They also fear for their kids, 5 participants reported that these vegetables could cause health issues. CF03 mentioned: *"my husband doesn't let me buy the vegetables that are coming from Bangladesh*

because of chemical concentration". Participant CM07 stated how the Italian diet is balanced. The south-Asian migrants often suffer from cholesterol, gastric, heart diseases and diabetes. According to SM04: *"The Bangladeshis don't get many health problems here, but you may have heard many people have cholesterol problem. They get this problem due to eating a lot of meat, as meat price is lower than vegetables".* Furthermore, cultural assimilation was not fully present, but it was noticeable when the informant implied, they find it difficult for the first few days to cope with the unorganized life in Bangladesh and CF05 stated: *"I get stomach trouble after going to Bangladesh, it takes some time to adapt to the environment".* To conclude the discussion the statement of one informant would be very interesting to mention to further strengthen the study: *"My wife eats betel leaf and areca nut a lot. Whenever any relatives are coming from Bangladesh or Rome, they bring some for her. You can't find imported betel nuts here. Betel leaf is good for the heart."* [CM07]

3.2.4 Cultural importance

It has been pointed by 5 sellers that, Jali lau' (species of bottle gourd) is always imported from Bangladesh. One grower described its unique shape and taste. *Jali lau is small and round in size. It has very good taste. I tried to grow it, but it was not successful. All the seed were rotten"*. The seed of this vegetable is hard to get. It grows in Italy but as discussed in the previous sections, the taste matters. All the male participants mentioned their affection for Bangladeshi food and Bangladeshi vegetables. Interestingly around half of the female participants stated that they don't like vegetables. However, they eat a few Bangladeshi vegetables. Around 90% of the participants referred to the traditional meal which consists of rice, meat /fish, and at least one type of traditional vegetable. *"People who understand the value of Bangladeshi vegetables eat them. Money doesn't matter when it comes to Bangladeshi vegetables."* [CM06]. The statement clearly shows the cultural identity which is preserved by keeping the habit of eating traditional vegetables. During the interviews, the participants were asked about their way of cooking. Over 80% of them stressed that they kept the same way of preparing the food but using less oil and less spices. Yet 3 of them mentioned they use

even more oil and spices than Bangladesh pointing the quality difference of the oil in Bangladesh and Italy. Selling 'halal' meat was an addition to vegetables and traditional spices. According to SM01, halal meat is one reason why he gets some Italian customers too. They merely buy vegetables.

Moreover, during the interviews, I was asked by some interviewees about my living in Venice, what food I eat, with whom I share the house, and if I face any problem when I cook Bangladeshi food. I got the question about cooking particularly because informant CM04 stated that in his workplace the Italians don't like the intense flavor of Bangladeshi cooking, so he avoids taking homemade lunch to work. He also mentioned the 'halal' term, which strongly related to the religion and so to culture. He tried to explain that it's not a problem that Italians don't like the smell of their food, likewise, the Bangladeshi migrants don't like the smell of 'pork' (not halal) that the Italians eat. This was mentioned by only one informant. Cooking and consuming traditional vegetables is seen among the elderly generations as a central part of cultural heritage, hence traditional vegetables may be a means of strengthening their cultural identity and representing it to the locals.

The above discussion suggests that no major dietary changes were present. Informant CF03 mentioned that she uses more cooking oil than she used to use in Bangladesh, because of the quality of the oil in Italy, and the way of saying was *"bad for health but good for self".* However, using olive oil has become a part of the Bangladeshi cuisine. Italians use olive oil for all their cooking and Bangladeshis seem to adapt to that very well, the price of the olive oil didn't affect the use of it. No matter how long the immigrants are living in Italy, the food practice remained the same with some minor changes. Dietary acculturation is the last thing to be noticed among the Bengali immigrants. Worth to mention that during the interviews most of the female informants were in traditional dresses. Throughout the interviews, I noticed that almost all the sellers (9 out of 10), all the male consumer participants were fluent in Italian. The use of Italian words was prominent while they were answering the questions.

"If you want to live and survive outside Bangladesh, the first thing you do is learn the language. I have learned the language not because of my business but also because I want to communicate with others, and I want to live in Italy. I love the way of their living and I find it difficult to manage in Bangladesh with all the unorganized lifestyle." [SM01]

The statement of SM01 clearly shows a strong effort to get accustomed to the host country's culture and lifestyle. Two third of the female participants are fluent in Italian. They mentioned that they can continue the conversation, but they are not good at writing in Italian. They even adopt the name of the traditional vegetables according to their understanding of Italian (table 2). Italian and Bangla are the two widely used languages among the Bangladeshis. They didn't speak English except for a few participants who mentioned working in restaurants. I came into contact with two female participants who came to Italy not long ago didn't speak Italian, but they were very eager to learn the language.

Table 3 Twenty-two codes were identified in the narratives through the textual analysis

Code categories	Codes	Number of citations
Availability	Accessible	15
	Greenhouse	2
	Frozen form	3
	Seasonal grown	2
	Imported	12
Health perception and special medical application	Blood purification	5
	Calm stomach	7
	Fresh quality	10

	Good for heart	1
	Healthy	18
	Joint pain	1
	Skin benefit	2
	Diabetes	4
	Digestion	8
Taste	Aromatic	5
	Better taste	12
	Bland taste	3
	Taste of home	17
Cultural	Food use	20
	Cooking pattern	20
	Demand	13
	Habit	4

Table 3 shows the code categories along with the keywords assigned under them and the number of citations. It was evident from my research that the affordability of the vegetables certainly can be considered as a barrier to eating traditional vegetables. During the growing season in Italy, the price of Bangladeshi vegetables decreases even less than the Bangladeshi price. According to the sellers, the price of bottle gourd and bitter gourd decrease to 50 cents/kg. In winter it's the opposite. Yet, they mentioned growers who have greenhouses they can grow vegetables all year round, though the price goes up. *"Today I am not very happy with my grocery, because the green chilies are very expensive, I can see the leaves still attached to the chilies, but they are saying it is imported and you must pay more. I love Bangladeshi vegetables, but sometimes I avoid buying it because of the high price"* [CM06].

During the winter the price of green chilies can go up to 12 euro/kg that is imported from Bangladesh. Worth mentioning that green chili was one of the most popular vegetables that were reported in my research. Price fluctuation determines the vegetable consumption to some extent as mentioned by the informants. CM06 also mentioned when the Bangladeshi vegetables are overpriced, he tries to buy more Italian veggies than Bangladeshi.

3.3 Commercial

Selling and growing Traditional vegetables in Italy

The high import cost and demand of the traditional vegetables pushed the migrants to grow and sell vegetables. 80% of the seller said they started selling vegetables not more than 5 years ago. Green chilies, aubergines, okra, radish, spinach, and bottle gourd were some of the most commonly found vegetables in all the Bangla mini markets. Vegetables like pointed gourd, green banana, teasel gourd, drumstick were also found in the shops. They were imported from Bangladesh. Time to time people look for those vegetables. Regarding this one seller (SM03) mentioned: *"The growers don't grow 'patal (Trichosanthes dioica* Roxb.*)' here. They tried but it was just a fail. I import them, because people love them and look for them. 'Patal' is a hot weather vegetable, it needs special kind of soil and special care. It needs etel mati (clay) and bele (sandy loam) mati to grow"*.

The best growing season for vegetables in Bangladesh is the winter season, while in Italy they grow all the vegetables mostly in the summer period (from late March to late October). During the harvesting season, the vegetables are even cheaper than in Bangladesh. "*Bangladeshi vegetables do not make much profit; they are cheaper in Italy than other countries*" [SM03]. Sellers sell both Bangladeshi and Italian vegetables; most diversity can be noticed in the Bangladeshi vegetables. The open market where the majority of the interviews were conducted consists of a large number of Bangladeshi shops. The sellers even write the local name (in Bangla) of the vegetables (Figure 3). They explain the traditional vegetables to the Italian customers by comparing them to very similar

Italian species. According to SM04: *"Italians like pumpkin a lot, they hardly buy okra. I don't get many Italian customers but when they come, I compare the Bangladeshi vegetable to a similar Italian vegetable, for example when I sell bitter gourd I say this is zucchini amaro and they understand."* SM01 mentioned they don't get many Italian customers because the Italians don't know how to cook Bangladeshi vegetables. Some Italian customers come and look for particular vegetables that they had eaten in London or Germany. Often, they ask for a recipe to cook them said participant SM01. Another reason why they get less Italian customers is the quality of handling vegetables. For example, SM01 stressed the Italians will not buy spinach from them because they sell them open. In the super-market, they will get better quality. The Bangladeshi sellers are not very efficient in explaining the nutritional fact of the vegetables they are selling. This seems to be also a reason for not having many Italian customers according to Informant SM01.

Some vegetables like drumstick, taro (corn), spur lime and few species of beans don't grow in Italy. Taro corn needs extremely hot weather and rainy season as mentioned by one grower. The fertilizer mostly used is organic, however, urea fertilizer is also used according to the permissible limit. Italians help the Bangladeshis with establishing their farm. They mentioned doing multicultural in one field. From the narratives, it was understood that most of the Bangladeshi growers in Italy own one land where they grow multiple vegetables at the same time. One grower mentioned they grew hyacinth bean, okra, bitter gourd, amaranth leaf and stem in one field. The method is to grow the vegetables in different lines. As stated by the grower they don't usually grow cauliflower, cabbage in Italy. They don't make profit. There is no buyer of those vegetables from the Bangladeshi grower as they are cheaper to buy from the Italian grower. They grow Bangladeshi vegetables when it's season, outside the season they grow Italian vegetables to keep the business going. The strategy to sell traditional vegetables to Italians is mentioned as: *"Lau (bottle gourd) is very popular among Bangladeshis and sometimes Italians also look for 'lau'. I suggest the Italians to make soup with it. The price of 'lau' is cheaper in Italy than in Bangladesh"* [SM03].

3.4 Generation difference in food choice

It was mentioned by the informants that the second-generation migrants don't possess knowledge about traditional Bangladeshi cooking, and they don't like traditional food as well. Many of the youngest informants are unable to describe in detail the culinary processes, this is due to their exposure to schools and Italian meals. All the participants were able to describe the traditional method of cooking, whilst according to them, the second-generation migrants are unfortunately unfamiliar with it. *"My kids like to eat Italian food. They eat Italian food in school. They try to eat one Bangladeshi meal with us, but they don't like it so much".* This was the reply from informant CM05 while asked about their kid's food choice. 2 male consumers shared house with Bangladeshi families. According to them, the Italian born kids don't eat Bangladeshi food as they are very fond of pizza, pasta, and, hamburger. Some second-generation migrants even cook their choice of Italian food for lunch and dinner while at the same house their parents eat Bangladeshi meal. *"I cook the same way as Bangladesh. I, my husband and my son eat Bangladeshi food every day. My daughter doesn't like it. She makes her own food. She likes to eat Italian food like pizza and pasta"* [CF05].

For the second-generation migrants, one Italian meal is a staple on the contrary to the first-generation migrants.

Chapter four

Discussion

4.1 Traditional consumption of Bangladeshi vegetables

Implications for public health issues

The perceived healthiness of the culturally significant vegetables has been determined by using the scale that starts from no to low, middle, and high health value (Pieroni 2001). Studies have mentioned the healthiness according to 'cold' and 'hot' categories. Vegetables which fall in the hot categories are not particularly good for health and vice versa (Jennings at al. 2014). However, in my study, the Bangladeshi immigrants living in Venice didn't divide the vegetables according to the mentioned categories in those two studies. Moreover. the study didn't find many health information and traditional ways to treat it. In the previous studies, it was found that similar immigrants' groups like Indian and Pakistani use a good quantity of red chili and home spices in their meal (Garnweidner et al. 2012). Nevertheless, the participants seemed to be aware of digestion problems as 8 of them suggested vegetables that are good for digestion and stomach problem. The exclusion of red chili was often mentioned to avoid gastric. Green papaya was mentioned as a vegetable to have great digestion benefits and work as a cure for joint pain.

Food consumption patterns in the south-Asian ethnic group, as in all other societies, are not determined solely by cultural factors. Rather, there is considerable scope for individual choice and variation within the broad cultural pattern (Reddy & Van Dam 2020). The informants often view the diet of the host country as healthier (Garnweidner 2012). Although most of the participants were not able to distinguish vegetables according to nutrition categories, the Italian diet was considered healthier than the Bangladeshi diet by the informants. The Italian grown Bangladeshi vegetables are considered better quality then the Bangladeshi grown. As mentioned above, the taste might vary but

the quality is better. The use of less oil and spices was the most discussed cooking pattern of Italian food.

The participants in my study followed the way to treat the disease like diabetes or problems related to the stomach and cholesterol problem, either by completely relying on medicine or by simply excluding some food that they believe is causing the problem. Knowledge of the special disease patterns in certain immigrant groups, such as the Bangladeshis, combined with well-meaning nutrition information from health personnel, can suggest in-depth nutritional knowledge and help them to recognize the unhealthy portion of their own traditional diet. With time many informants are adapting to a more healthy diet by keeping more fruits and vegetables and cutting red meat.

Introducing agricultural and plant diversity

In the phase of climate change, one of the important issues is the loss of diversity. Due to frequent changes in climate, some events are becoming more severe such as heatwaves. This causes loss of diversity as the environment is getting unsuitable for many plant species (Wolverton 2014). Most of the land in Bangladesh is overexploited and the quality of the soil is deteriorated which increases the need for a high amount of fertilizer (Ali et al. 2001). Poor quality of the Bangladeshi grown vegetables seemed to be another barrier in the path of importing traditional vegetables (Sabur et al. 2004), besides the high import cost. *"We are not permitted to import teasle gourd anymore, they found a bug inside one teasle gourd. From then on we don't import it from Bangladesh"* [SM04].

Over the fieldwork, information about the growing season was fascinating. While the prominent growing season is winter in Bangladesh, the Bangladeshi vegetables are growing during the summer in Italy. I found out that Bangladeshi vegetables have great potential to grow in Italian soil. The Italians are not aware of Bangladeshi vegetables. The growers get help from the Italians about planting and harvesting their crops. By carefully analyzing the quality and nutritional fact Bangladeshi immigrants can play a crucial role to provide agricultural diversity in the host country. Besides, the growers mentioned that they tried to poultry farms too. While walking past the open

market several Italian species similar to Bangladeshi species were noticed. For instance, bottle gourd, squash, beans, etc. Yet, there lies significant dissimilarity in how the vegetables taste like. If one Italian species doesn't grow well in one season there is a possibility that the similar Bangladeshi species can replace that vegetable making a diverse choice of vegetables. The sellers believe the environmental condition in Italy is suitable for growing tropical vegetables. They started growing vegetables as other Bangladeshis were growing vegetables in different parts of Italy like Palermo, Sicily, etc. (Nasim 2010). Thus, Bangladeshi plants could be taken as well adapted to the new environment. The study will suggest future studies to focus on the potential plant species with both environmental, economic, and health values. Further study also should carefully analyze the threat regarding invasive species.

As Bangladesh is a riverine country, fish composes a large part of their daily meal (Kamal 2018). Two growers mentioned they tried to do fish culture in Italy, but it didn't work. But growing vegetables was a success. According to a grower: "*I tried to do fish and duck, but it was not easy. But growing hyacinth bean was easy and it brought big profits. Okra and hyacinth beans are the vegetables that are more economic".* While papaya is considered as tropical fruit, for the Bangladeshis it serves as both fruit and vegetable (The daily star, 2020). This statement about papaya is a little biased. Most of the sellers pointed on the green papaya in their shops, they expected me to already know about the dual use of papaya. In my opinion, the papaya they were selling was mostly as a vegetable. Although I also noticed the ripe papaya sold as fruit. This provides important information about the different use of one vegetable.

4.2 Eating food creating identity

"Ethnic food traditions tend to be one of the cultural traits that pose the most resistance to change in terms of modernization and adaptation to the host country" (Pieroni et al. 2007). Food as a cultural marker has been widely used to portray cultural habits and identity claims by specific immigrant communities in different host societies (Vallianatos & Raine 2008). We remember various cultures through their food. Consumption of traditional vegetables is an integral part of cultural practice. A discussed in section 3.2.2, the taste of Bangladesh cannot be replaced no matter which corner of the world the Bangladeshis are living. Despite living away from family and home the cooking customs didn't change. For the Bangladeshis in Venice 'taste of home' determines the vegetable consumption and creates various branches of creativity by exploiting the resources of the new environment in the host country. Italian vegetables were consumed occasionally and as mentioned in the previous section the immigrants that are new in Italy find it difficult to cope with the new vegetables. Availability of the Bangladeshi vegetables is the only reason they are eating vegetables as according to 3 female informant Italian vegetables are tasteless. Meal pattern change and new food enter the immigrant's cuisine, yet the importance of traditional food doesn't diminish (Vallianatos & Raine 2008). Moreover, according to the sellers, the frozen vegetables are substitutes when the vegetable price is relatively high. To satisfy the demands, the vegetables are imported from India as well when it is not available or not permitted to import from Bangladesh. Bangladesh has no special cargo planes; the exporters have to pay a high rate of airfreight charge for the space in the airplanes. This problem particularly arises during the season from June till October (Hoq et al. 2012). Despite the obstacles, vegetables are still imported and consumed. It can be said that the effort to maintain the identity through various uses of traditional vegetables is prominent in the Bangladeshi community. Betel leaf with areca nut was mentioned. In Bangladesh dessert is almost never served after lunch or dinner, but for some household's betel leaf is a must (Ahmed 2020). Though the participants mentioned that betel leaf is good for heart, the main purpose of mentioning the betel leaf was describing the cultural and

same eating practice. It was quite surprising to see Bangladeshi immigrant in Italy are talking about it and still managing to find a way to get their hands on it while it is almost impossible to find it in Venice and no one but one participant mentioned it. Despite knowing the health effects the immigrants often struggle to change their diet. At the same time, food culture is so tightly linked to identity that there are aspects that will never change. Furthermore, example from the Participant CF05's comment in section 3.4 provides enough information on how food preferences change with the generation. While the parents don't change their food habits, the children tend to prefer the host country's food more.

4.3 Integration in the host culture

Ethnicity is a source of social identity (Jamal & Chapman 2000). Ethnic groups are composed of people who share common cultural characteristics, including history, beliefs, values, food and entertainment preferences, and language as discussed earlier. Ethnicity typically incorporates both race and culture (Vallianatos & Raine 2008). "The ways in which informants related to food on a daily basis can be classified along several axes: in terms of their sense of post-migration loss of culture and familial/geographical connection; in terms of their attempts to maintain ethnic identity; and in terms of the struggle to maintain all aspects of their health in a new cultural environment" (Kamal 2018). During migration, ethnic minority consumers experience multiple states of being which inform their interactions with their own ethnic group as well as the host society (Chowdhury 2000). Before settling in the host country, some immigrants had lived away from their homes mostly in the Middle Eastern countries (Del Franco 2010, Morad & Gombač 2018), which implies that some immigrants are already aware of the changes that may take place during post-migration. After three to five years of struggling they finally settled down and slowly bring their family members (Della Puppa 2015). Over the fieldwork some informants mentioned living in bachelor apartments, sharing house with

other Bangladeshis as they are just starting with their life. Eating traditional food is a common practice done by the immigrants to make themselves feel more at home.

As previously mentioned, acculturation is a process by which usually a minority group, adopts the cultural patterns for example beliefs, folkways, and language of a dominant or host group (Satia-Abouta 2003). Several factors are responsible for facilitating an individual or group to assimilate into a new society, either in a new country or a different area within the same country. The larger the contrast between the immigrant's original and host cultures, the more difficult acculturation becomes (Cordero 2010). First step of integration is learning the language. SM01 mentioned he and the other Bengalis learn the language either by asking help from the other Bangladeshi or they join the state-owned language school. *"speaking Italian is easy, but writing is a problem"* [SM02].

Due to the lack of availability of familiar food, immigrants face uncertainty about how to adapt their food habits to the new environment (Yeh et al. 2008). Food acceptance and habit are driven by the inclusionary- exclusionary principle, which states that the ethnic groups include the food that are preapproved and excludes the others (Vallianatos & Raine 2008). The data in the study show clearly that traditional knowledge related to culinary uses of vegetables among Bangladeshi migrants is quite sophisticated; for each given vegetable it was possible to trace a specific preferred culinary preparation. Being from hot and humid countries buying fresh vegetables every day is a part of cultural practice (Kamal 2018), thus the freshness of the vegetables is a factor that always a matter of attention for the Bangladeshis in Venice and it becomes even more important when they integrate their traditional vegetables in the Italian market. And it was mentioned by majority of the informants that Italian life is organized, and their diet is healthy.

"We have adopted the Italian way of eating, for example, first we start with an appetizer, then the main course and then a dessert is a must. But in Bangladesh we don't have this way of eating. This way of eating helps the food digest better and clears the stomach as well as helps with the bad breath" [CM05].

The dietary pattern may have changed but the love and affection for Bangladeshi food are still the same, added participant CM05. Eating Italian salad has become an integral part of the immigrants. CM08 even mentioned Italian 'Radicchio' makes good salad; he mentioned he has been living in Italy for more than 30 years and quoted:

"We also drink wine. I went to see the wine production with my family. It's fascinating to see how they make it. If you drink the wine after dinner it is very good for digestion. I have adopted the Italian way of living. I like the way they maintain their life. I don't like the unorganized life in Bangladesh."

"A number of qualitative studies among South Asians have revealed the immense social pressure to eat and prepare heavy, fat-rich food at social gatherings" (Holmboe-Ottesen & Wandel 2012). I found it to be relevant for the Bangladeshis when participant CF05 mentioned: *"If we arrange a party in our house, we always prepare a big Bangladeshi feast. No party is complete without Bangladeshi food. Traditional vegetables in the Bangladeshi migrant's diet."*. Based on the participants' narratives, the possible pattern of dietary acculturation in this study can be conceptualized 'flexible continuity', which means that they adhered less strictly to their original food culture while simultaneously adopting some of the host country's food culture (Garnweidner et al. 2012). For instance, *"We like Italian food a lot. I make pizza and pasta at home"* [CF02]. To end the discussion the comment of CM05 will be remarkable:

"I have chosen Italian shop, because they are very regular. They value the employee's time. They are very kind, and I have very good work/life balance. If I need money or I get some crisis moment they will help me. I love how civilized Italians are. When I go back to Bangladesh, I feel sick because of the unorganized lifestyle, unhealthy diet".

Chapter five

Conclusion

Retention of ethnic food behavior is one of the most enduring aspects of a migrant culture. The study has tried to establish a connection between the motivation behind eating traditional vegetables and new paths related to vegetable consumption. The primary motivation to consume traditional vegetables was taste and culture, but the picture is much more complex. As discussed in earlier sections vegetable is consumed as a side with rice, lentils, and fish/meat, and all the participants mentioned eating traditional vegetables, Italian vegetables were mentioned only when asked. Female participants particularly stated eating only a few vegetables. Pumpkin, okra, bottle gourd, spinach, Indian spinach, broccoli, cauliflower and reddish were the most consumed vegetables. During the research, no major nutritional and health knowledge were seemed to be present. Among 30 participants the majority of them just mentioned diabetes and a few mentioned cholesterol and gastric problem. They stated those with cholesterol and gastric problem try to avoid fat and food heavy in oil and spices. Important to notice that, some of the informants excluded red chili and started cooking only with green chili to avoid problems related to gastric. It not only enhances the flavor of the food but also strengthens the heart. A good number of informants were aware of the vegetables that they believe good for digestion. Among the more uncommon recorded vegetable items listed were drumstick, Bangladeshi olive, teasel gourd. They are still occasionally consumed, again depending on the availability. The study found out that the migrants are still working on some vegetables that don't grow in Italy. Nonetheless, they kept importing them because of the demand. This lack of adoption of food choices of the host culture may be one mechanism of expressing and maintaining Bangladeshi identity.

This study points out that it is crucial to enlarge the immigrants' sustaining knowledge about the nutritional values of the vegetables. As mentioned by the sellers that the way of handling the vegetable

matters, the study will suggest the future study can focus on bringing forward the solution about how to improve the strategies of handling the vegetables. Although the Bangladeshi migrants don't divide the choice of traditional vegetable consumption according to their medicinal value, they still believe some vegetables like bitter melon can have benefits or medicinal use for diabetes and I strongly feel that besides their taste, the perceived medicinal value of vegetables is also crucial in their appreciation. It can be emphasized that the information derived from various traditional medicinal perceptions can be utilized for drug discovery purposes. Moreover, in this study, many of the participants stated, "all vegetables are good for general health". Getting accustomed to the culture by following an Italian eating pattern was also noticed. Culture and taste play a key role in establishing Bangladeshi identity and it opens up new paths for integrating into the new host environment through immigrant's strategies to exploit new opportunities and provides solution to ongoing global problems.

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Appendices

Appendix 1: Questions for sellers

1. Free list of vegetables that they are selling?
    a. If they sell any Italian vegetables list of the Italian vegetables.
    b. Local and Italian name
2. Where do they usually buy the vegetables?
3. Do they sell only to Bangladeshi people or they have Italian customers too?
4. Why do the people look for Bangladeshi vegetables?
5. Do they import the vegetables that don't grow in Italy? If yes, why?
6. Are there any vegetables that are hard to find and grow in Italy, but people still look for them?
    a. If yes, name of the vegetables.
    b. Are they willing to pay more for those vegetables?
7. Do the people look for any vegetables that they believe have particular health benefit?
8. Price comparison of vegetables (in Bangladesh and in Italy)
9. Is there any peculiarity about any vegetables?

Additional:

1. Why selling vegetables?
    a. Is there a history of selling vegetables in Bangladesh?
2. Do they sell any wild plant?
3. How long they have been selling vegetables?
4. First or second-generation immigrant?

Appendix 2: Questions for consumers

1. Free list of the vegetables they use (Both Bangladeshi & Italian)
    a. The way of using the vegetables
2. Why they look for Bangladeshi vegetables?
3. Who of the family member usually go to buy the vegetables?
4. Do they look for vegetables that they believe have medicinal value?
    a. If yes, for which part of the body (ear, eyes, throat…etc)
5. Is it important to keep vegetables in their daily diet?
6. Has there been any change in their dietary pattern after coming to Italy?
7. Is there any difference in taste of the same vegetable from Bangladesh that grow in Italy?
10. How do the new commers behave towards the vegetables eating?
11. Has there been a change in quantity of eating vegetables than Bangladesh?