

Ethnicity, Ethnic Food And Diabetes Mellitus Type-II

Fareeha Sarwar*

Vol. II, No. 1 (2019)

Pages: 18 – 27

Abstract

Ethnicity is the identity of an individual with respect to its culture, religion, ancestral pattern, norms and values, which by a person can give its identification. People of the same ethnicity lives together, becomes their group. The similarities or differences of people in their cultures can be languages, food, rituals, nationality, norms, and values that identify their ethnicity. In ethnic groups, Diabetes Mellitus Type-II is becoming very common. Diabetes type-II is a global disease nowadays, but in some ethnic groups, it is at higher risk, like in Africans, Hispanics and Native Americans. Some ethnic group have their specific ethnic foods. For this, the descriptive methodology has been used for the collection of data, including methods of an in-depth interview. From this above discussion, it has been concluded that some ethnic groups are at high risk of diabetes type 2, and some ethnic foods, which include those ingredients which are the risk factors of diabetes type II, should not be taken to reduce the risk of Diabetes type-II.

Key Words: Ethnicity, Ethnic foods, Eating habits of diabetes Mellitus Type-II patient, Ethnic Treatment.

Introduction

Ethnicity is a group of people having the same ancestral pattern, cultural pattern, norms and values, and they can identify themselves by these similarities. It is a status which is given by the society to a person on the basis of its religion, ancestral pattern, lifestyle and socioeconomic status. 'The concept of identification of a person by the cultural differences in them is called ethnicity' (Verren, 2018). The cultural differences can be in language, diet, rituals, lifestyle, norms, values and nationality of a person. These similarities or differences can help in identifying the ethnicity of a person.

Ethnicity is an identity or recognition of one person of one ethnic group to another person of another ethnic group based on the differences between values, norms, beliefs, languages, nationality, origins, religions, culture and other things. 'Ethnicity has been based upon the basic differences among ancestral or decedent origins, and they also shared a common historical and cultural heritage and ethnic group based on the concept of sharing a common history, culture and ancestry' (Hostler, Kephart, & Zellner, 2012).

Ethnicity is made up of many concepts. Every ethnic group is different from other ethnic group in many aspects. These may be religion, language, history and many other concepts. 'There are many things under the umbrella of ethnicity which variate from case to case. These are the basis of ethnicity, the markers of ethnicity, the history of ethnicity and the goals of ethnicity. For example, in one situation, the decisive distinction between two groups may be religion, but in other groups there many other characteristics like language, history or race which may have the same functions' (Eller, 1999).

As the ethnicity word is made up of many concepts, so a person has to use their identity according to a situation about which a person has used in what situation. A person has an identity of socioeconomic or social status, language identity, race identity and many others, so a person has used it according to the situation. 'ethnicity is an identity which is linked to the social status of a person, so this ethnic identity of a person changes as it depends upon the situation, that when to use one ethnic identity in which situation and the when to use the other ethnic identity in another situation. This is known as "Situational negotiation of identity"' (Lumen, 2018).

The history of the word ethnicity shows that the word ethnicity evolved from the Greeks. Ethnicity had been seen as derived from the word ethnos of the Greek language. 'The Greek term ethnos (derived

* Pir Mehar Ali Shah – Arid Agriculture University, Rawalpindi, Punjab, Pakistan. Email: fareehasarwar628@gmail.com

from *ethnikos* and *beathenic*) was used to refer to non-Greeks or to other peoples who shared some biological and cultural characteristics and a common way of life. The Greeks tended to refer to non-Greeks as a peripheral, foreign barbarians, or *ethnea* and referred to themselves as civilized people, *genos Hellenon*' (Hutchinson & Smith, 2012).

In anthropology, ethnicity is made up of the word *ethic*, which means culture. This perspective mostly used in cultural anthropology. But ethnicity is a very vast term; it shows the identity of a person in many aspects in national, cultural, historical, linguistic aspect and many more aspects. 'Nowadays most of the anthropologists are using the term *etic* which indicates to the word culture by the anthropologists, and the term *emic* is also used by the anthropologists it indicates to the native's point view of their culture' (Rickford, 1997).

As it had been seen, that the word ethnicity is derived from the Greek language, but in anthropology, the word ethnicity had been used in slightly different ways. It refers to the identity of an individual, which had been based on some physical as well as cultural differences. 'It had been seen that since 1996 anthropology and sociology start using term ethnicity to indicate the individual's cultural heritage which is different from the individual's personal physical characteristics' (Smith, 2012).

From the above discussions, ethnicity can be further explained by examining its subjective and objective aspects. 'All the observatory aspects related to cultural and shared symbols of a particular group had been seen as objective aspects, it involves all the traditions of language and religion which had been made by a group that includes, hairstyle, dressing, food preferences and many other characteristics. The internal belief of people, who shared common ancestry, origin, family and their homeland known as the subjective aspect of ethnicity' (Smith, 2012).

In anthropology, ethnicity can also be explained other than language, culture and nationality by kinship system, religious traditions etc. The ethnicity of an individual is based upon the kinship system, social ties and also on religious traditions. It had been observed that these all concepts had deep roots in an individual. This is due to the process of enculturation. Ethnic affiliations had a persistent in an individual because it had been seen that these are the fundamentals of a person's identity' (Geertz, 2012).

According to a primordialist model in anthropology, the concept of ethnicity can be explained as ethnicity has always been experienced as a kinship phenomenon, continuity within the self and within those who share an intergenerational link to common ancestors. Ethnicity is partly experienced as being bone of their bone, flesh of their flesh and blood of their blood. It had been viewed that a human being itself is a reflection of its ethnic identity because its ethnicity is felt from its blood, bones and flesh. It is crucial that we recognize ethnicity as a tangible, living reality that makes every human a link in an eternal bond from generation to generation, from past ancestors to those in future. Ethnicity is experienced as guarantor of eternity' (Fisherman, 1980).

The ethnic identity is given to the person when the person is born in that specific ethnic group. He / She adopt the culture, identity, nationality and language from its childhood. This ethnic identity is given by the society to the individual that society maybe its friends, relatives, and kin or from its ancestry. The individual has to adopt it permanently. 'Ethnicity is a status that is given to an individual by its and is derived from the individual's kin or decedents of the human society. That is why this status is permanently given to an individual (Greetz, 1963).

It is observed that ethnic identity can be given to a person by considering its personality. This personality can be through culture or by the social group of a person. This phenomenon is running throughout the human races. 'The psycho-cultural model is an explanation about the cultural psychologies and their environmental, social and cultural effects on all the human races. According to the concept of the psycho-cultural system, ethnicity is divided into cultural shaping of personal and social identity. There is a

phenomenon called “possession” that explains that an individual is taken up by its personality’ (Winkelman, 2009).

Now everyone is adopting the same culture; everyone is trying to get modernized. People are trying to have some food, dress, language etc. The whole world is trying to have equal industrialism by naming it as modern culture. Everyone is due to adopting modernization, decreasing the importance of ethnicity. ‘Weber introduces the primordial phenomena like ethnicity and nationalism will have a decrease in their importance, and it may happen that they are removed due to the modernization, industrialization and individualism’ (Erikson, 2002).

Now a day, this era is now becoming an era of globalization. People are trying to link and adopting each other culture. Now modernization is moving the world towards globalization. The ethnic differences are slowly moving towards globalization. ‘Now, the society in which we all are living is now become globalized, having more extensive contacts between the people having different ethnic backgrounds and cultures’ (Scupin, 2012).

It has been seen that diabetes type 2 is occurring in all ethnic group worldwide; it not restricted to only one or two ethnic groups. It has been occurring mostly at the age of 35-40. Somewhere it has also seen in children below teenage, but it has been a rare case. ‘It has been noted that diabetes type has been estimated to be at least 90% of diabetes in the whole world, but the percentage of prevalence, incidence and diabetes progression ranges within the ethnic groups’ (Oldroyd, Banerjee, Heald, & Crickshank, 2010).

It had been seen that there were many risk factors that have been contributing to the development of diabetes type 2. The reason of these factors for playing a role in diabetes type 2 has not been found out till now, but prevention and treatment can help in the control of diabetes type 2. ‘It has been seen that several risk factors have been identified as contributors in the development of diabetes type 2 and cardiovascular disorders. These contributing factors include body fat, abdominal fat, obesity and ethnicity, which include those ethnic groups which can be at higher risk of diabetes like Africans, Hispanics, Native Americans’ (Goran, Ball, & Cruz, 2003).

It has been seen that diabetes type 2 is increasing in the whole world, but globally, it has been seen that in some ethnic group, it is common. ‘Globally, it has been seen in some ethnic groups that ethnicity has been a major risk factor for diabetes type 2. America diabetes association has shown that in America 15.9 percent of Native American and Alaska Natives has diabetes type 2. 13.2 percent of all non-Hispanics black Americans and 12.8 percent of Hispanics have type 2 diabetes and 9 percent of Asian Americans have been seen affected with diabetes type 2. These ethnic groups have high risks of Diabetes type 2 globally, but the reasons have been seen as complicated or may not understand still now’ (Vann, 2016).

It can be seen from a regional perspective that the prevalence of diabetes type 2 has also been increasing in Pakistan, being an Asian country. Diabetes type 2 has been seen as common in both males and female. ‘According to the current report, it has been noted that the prevalence of diabetes type 2 in Pakistan is 11.77%. The prevalence of diabetes type 2 in Males of Pakistan has been noted to be 11.20% and in females 9.19%. The prevalence of diabetes type 2 in ethnic groups according to the province of Pakistan has been reported that in Punjab province 12.14% males and 9.83% females, in Sindh province 16.2% males and 11.70% females, in Baluchistan province 13.3% males and 8.9% females, in urban areas 14.81% and 10.34% in rural areas’ (Meo, Zia, Bukhari, & Arain, 2016).

Ethnic Food and Diabetes Type 2

The food that is made by people of a specific ethnic group or different ethnic groups, indicating their culture and belongs to any specific area, is known as ethnic food. ‘Ethnic food is a food that is associated with a

specific region or identifying any specific culture. Food dishes that are belonging to different countries are obviously known as ethnic food' (Ford, 2014).

As ethnicity is the identity same as that ethnic food also indicates the identity of the respective area, culture and status. Everything that is being related to a human being has an identity like clothes, shoes, food, house, etc. of one person indicated its status, standard of living and culture. 'Food has an identity as other things have like fashion, speech music etc. Every culture has its own ways to cook food, and that food then indicates that culture. Every society, culture or area has their own food preferences which then become their identity markers' (Fox, 2015).

It is seen likewise other things that are involved in culture transferred from one generation to another either in their pure form or by some modification like dress pattern, living styles, events etc. food is also a part of our culture. Different dishes of different areas are introduced in the whole world due to the interaction of peoples. And same as other things of culture ethnic food is also transferred from generations to generations. 'Food is also considered as an essential part of every culture. Those traditional cuisines which are eaten by elders are now also introduced in this present generation. These traditional dishes also indicate the identity of specific culture or area of that culture. People migrate from one area to another, and they cook their traditional ethnic food, so then they preserve their culture at that new place' (Le, 2017).

All the ethnic food from where ever they belong and whatever culture they represent, they contain all the basic food items like rice, vegetables, meat etc. many of these contain processed carbohydrates, calories and sugar contents which leads to the cause of Diabetes type2. 'Those food products which can be made with white flour, white sugar, white rice contains a high amount of carbohydrates in a processed form. These are the essential items to make whole food, but they stripped out the important bran and fibre of healthy vitamins and minerals. This food cause spikes in blood sugar and insulin level, which can lead to diabetes, type 2' (Radcliffe, 2013).

In gatherings, ethnic food is mostly made, and in every serving, it must contain drinks and soft sweetened drinks. It is considered as the universal culture to serve the cold drink with every food in gathering or events or festivals. People do not understand that these soft sweetened drinks are health hazardous. They lead to many health problems. 'Those beverages that contain sugar like soda, lemonade and sweet teas are directly linked to causing Diabetes type 2. This may be because the excess calories increase body weight and also because the increase in sugar cause insulin resistance' (Weisenberger, 2012).

Every food contains fats; excess use of fats can increase cholesterol level. Increased level of cholesterol causes many problems in the human body. The Asian ethnic foods specially made with excess use of oil or Ghee and also vegetable fats universally use of bakery items, cakes etc. also cause an increase in cholesterol which in return leads towards chronic diseases. 'The unhealthy or junk food and trans fat increases the cholesterol level in the blood which is the high risk of getting diabetes type 2. Trans food can be that food which is baked or fried in restaurants and the full-fat milk cheese excess use also leads towards diabetes type 2' (Rickford, 1997).

Meat is cooked universally. The non-vegetarian people use an excess meat. Fresh meat is good, but excess use can cause health problems. Plant protein is healthier than that of the animal protein. Red meat is majorly considered as a cause of diabetes type 2 but other meat white etc. are also the cause of it. Every ethnic food includes meat. The foods served in events and festivals must include meat dishes. 'Researches have revealed that people who ate animal protein in excess has a risk of 35 percent of getting diabetes type 2 than that of people who take plant proteins. Animal protein include any kind of meat processed or unprocessed, white or red meat. It is found that even the people who have a single serving of red meat one day had a 19 percent higher risk of diabetes type 2' (Cotey & Harris, 2017).

People take fruits in different forms either cooked or raw. Intake of fruit is healthier for the body. But excess use may be proof harmful. Excess intake of fruit and no excursion make a person obese which may leads towards diabetes type 2. Use fruit is also good in the sense that people avoid use of table sugar or artificial sweeteners. 'The intake of excess amount of fruit may contribute to weight gain which results as a risk factor for diabetes type 2. If a person consumes more fruit then that of its allowance then that person adding much sugar in diet' (Sissons, 2019).

In our daily life and as well in ethnic foods we have an excess use of table sugar. This table sugar also called free sugar. It is a myth that people think use of sugar can lead to diabetes but the fact is little opposite. Free sugar or table sugar causes obesity in person than that will leads to the cause of diabetes type 2. 'The sugar that is mostly added in juices, beverages or by a person itself at home called free sugar or table sugar. It does not cause directly Diabetes type 2. The use of sugary foods and beverages leads us to use free sugar, and that sugar cause weight gain which leads to the risk of getting type 2.

From all the above discussion it is seen that as ethnic food is also made with those items by which an ordinary food is made and though this it is seen that carbohydrates on the form of white rice, white floor etc. fats, sweetened soft drinks or drinks, free sugar or table sugar and red meat are all the risk factors which can cooperate in the cause of having Diabetes type 2.

Eating Habits OF Diabetes Type 2 Patients

Having diabetes type 2 does not mean that one should stop eating or enjoying food. A person having diabetes type 2 has to eat according to the meal plan which is given by the physician or according to their glucose level. "A diabetes diet simply means eating the healthiest foods in moderate amounts and sticking to regular mealtimes. A diabetes diet is a healthy-eating plan that's naturally rich in nutrients and low in fat and calories. Key elements are fruits, vegetables and whole grains. In fact, a diabetes diet is the best eating plan for almost everyone. For a diabetic type 2 patient, diabetic diet help in the control of blood sugar level" (McQuillan, 2016).

Diet of Diabetes type 2 patient

From this research, diabetes type 2 patients were also asked about their die. Almost all the patients said that they like to eat fruit and they eat fruit daily or at least once a week. Some patients said that they eat all type of fruits like mangoes, guava and other fruits as well. Some patients said that they only eat those fruits which their physicians have prescribed them to eat or those having low calories. Some patients also eat fruits of high calories like mango, peach and others but in a balanced quantity like one mango in one day.

Most of the patient takes soft drinks. Some patients left soft drinks after diabetes but mostly take soft drinks too much. The patient who labored and have to eat a meal in hotels or small café use to take soft drinks almost daily; they said that they take soft drinks to reduce acidity, and some were addicted to soft drinks. Some people said that they take soft drinks daily with their meal before diabetes, but now they stop taking soft drinks. Some people said that they only take a soft drink on some special occasions or when they were served with soft drinks. Soft drinks are carbonated drinks that contain a high quantity of processed carbohydrates which is very much harmful to a diabetic patient.

The patients living in villages or belong to villages, especially old age patients (ages 60 and above), were used to take Hukkah, which contain tobacco. Some patients used to take cigarettes, but most patients said that they do smoking before diabetes, but after diagnosing of diabetes they left smoking. No patient was found taking alcohol or any other addictive drugs. Most of the patients especially female patients said that they used less oil in their meal or according to their meal chart, but the patients who eat food daily from hotels and café eat more spicy and oily food, which can increase cholesterol level and weight results in the increase in sugar level.

Most of the patients said that they eat sweet dishes without adding sugar to it. Some patients said that they eat sweet dishes only on occasions or when they were served with them. Some of the patients said that sweet dishes are their weakness; they need something sweet in their everyday meal. Some patients said that they do not like sweet dishes as much, so they do not eat sweet dishes after diabetes.

Ethnic treatment of diabetes type 2 in Field

It has been seen that there were some patients who take some ethno medicines or doing some ethnic treatments along with their allopathic treatments; some patients only take ethnic medicines with include Phaki which is made of different ingredients, some patients perform yoga, and some patients used religious holy words or religious practices for their treatment.

Case Study: Diabetes Type 2 Due To Polycystic Ovaries Syndrome and Excess Use of Soft Drinks

Her name was Rukhsana. She was 48 years old; she was an educated lady. She has done bachelor's degree. She was a teacher before her disease. She was unmarried. She lives alone. She has a polycystic ovary syndrome for two years. She was a working lady before her disease. She was a teacher in a Government school in her village. She left her job due to weakness because of her diseases. She lived in a village Missa Keswal in district Rawalpindi. She was very stressed about her both diseases, majorly due to continuous bleeding.

She said that her mother died in her childhood. Her father raised her; she has no sister but two brothers. When she has done her bachelors, her father died after her father died her brothers look after her. She said that when she was young, she went to Rawalpindi city for educational purpose there; she said that she used to take cold drinks and fast food daily. She said that our friends have competitions of drinking soft drinks almost daily and she drank two bottles at a time in that competition. She said that she lives in a hostel and she used to take fast food; she said that after two years of her study, when she came back to her village at her home, she did not leave her habit of taking soft drinks. She takes soft drinks at least once a day.

She said that she started teaching after completing her education in a government school in her village. She said that she feels a swear pain during her periods after 20 years. She said that the pain was as much swears that she has no relief before three days. She said that she takes pain killers, but she gets relief for only a few hours. She had also consulted the doctor, but they do not diagnose it properly. She said that the doctor restricts her for not to taking drinks and junk food, but she does not avoid taking them. She said that at the age of her thirties, she had a disturbed menstrual cycle; she had periods twice or thrice in a month.

Due to excessive bleeding, she was becoming weaker and weaker. She said that due to the death of her parents her brothers do not try to get her married because she was earning and bringing money in their home. She said that there were some proposals but they were not compatible of her. She said that with the passage of time the bleeding time increases and she has to left her job because of continues pain and bleeding. She said that because of this disease she has to leave her friends, family members and now she lives alone in one room of her father house sometimes her niece stay with her but mostly she lives alone.

She said that two years ago she gets her checkup from a specialist gynecologist, and she was diagnosed of polycystic ovary syndrome and they prescribe operation of ovaries. Because of continues bleeding she get too much weak and doctors said that due to her weakness she cannot be operated. She was now taking steroid for her the recovery of her weakness. One year ago she was diagnosed of diabetes type 2. Doctors said that she has diabetes type 2 because of polycystic ovary syndrome and also because of the excess use of soft drink and fast food.

From the above case, it had been concluded that the patient gets diabetes type 2 due to polycystic ovary syndrome and due to the excess use of soft drinks. 'It had been seen that level of insulin get higher in polycystic ovaries syndrome which is the characteristic of type 2 diabetes. Women having polycystic ovaries syndrome were at the increased risk of diabetes type 2' (Diabetes. co, 2019). Soft drinks contain soda which had been considered as one of the major cause of diabetes type 2. 'From the researches, it had been found that the intake of too much soda increases the risk of diabetes type 2' (Marengo, 2018).

Ethnic Treatment of Diabetes Type-II

Despite the use of biomedicines, some people preferred the use of the medicines. Although it has been difficult to make ethnomedicine, they have effective results. Ethno medicines are the traditional medicines having social and cultural mixture and being practised in many ethnic groups. These medicines also use bioactive components in plants and animals. 'The subfield of medical anthropology, ethnomedicine, deals with the study of the system of treatment that is social and cultural in their origin, structure, function and significance and they can be analyzed in a political system, religious system, kinship, language and other systems' (Kleinman, 2009).

Ethno medical treatment is related to culture; it varies from culture to culture. Sometimes when these cultures get mixed up, the treatments of common diseases also practised the ethnomedical treatments of each other. As diabetes type 2 is seen as the most trending disease in most communities, countries and cultures, but this disease is mostly related to dietary habits and exercise, so the ethnomedical treatment has to be done by considering the dietary habits of a specific culture. 'In the ethnomedical system of medical anthropology, the cultural relatedness of recognition, treatment and the illness of disease are seen. For the ethnomedicinal treatment of diabetes type 2 the, distribution of diabetes type 2 in different cultures has been observed. In those communities which have diabetes type 2, their dietary habits and exercises patterns are examined. Because diabetes type 2 has a strong relation with dietary and exercise habits and similarly with cultural ties. So the ethnomedical approach is very useful for treating diabetes type 2' (Gomez, 2016).

It is observed that the ethnomedical treatment in mostly countries, communities and in some culture has been done through herbs or plants. By making different medicines of plants or by using plants in different ways, diabetes type 2 can be treated or controlled. But the results are shown in a long time. 'As plant-based treatment are safe and more effective to use, that is why they are popular and practiced worldwide. Therefore herbalists in Kenya use plants for the treatment, and they are being consulted by patients for the treatment or control of many diseases, including diabetes type 2' (Chege, Okalebo, Guantai, Karanja, & Derese, 2015).

In ethnomedicine, the religious system is also analyzed, and the people who are closed to their relation mostly prefer the religious treatment for their disease. Despite the use of herbal or biomedicines, the religious medicines in the religious believers are seen as more effective; this may include their spirituality or belief in them. The religious believers prefer the physician who can give them medicine on religious accounts. 'Most of the people who are close to their religion has the importance of religion in their own lives. For this, they prefer the religious factors from a physician for their treatment and control of the disease' (Chin, Ming, & How, 2011)

In Muslims, it had been observed that they also get treatment of many diseases from their Holy book "The Quran". There have been different ways to read the VERSES of the Quran for the treatment. Some people read Verses on water and then drink that tailored water. This treatment is also included in ethnomedicine as it can be seen as a spiritual or religious treatment. The translation of most commonly used Verse in Pakistan for the treatment of diabetes type 2 is "And say, (Oh Muhammad) My Allah, cause me to enter a sound entrance and to exit a sound exit and grant me from Yourself a supporting authority"

Surah: Bani-Israel Verse: 80, Al-Quran. The way to read this Verse for the treatment is first to read "Durood Sharif" and then read this Verse and then pray for health.

Prevention

Diet has a great role in the prevention of any disease. People take healthy food, stays active, have physical activities or exercise can prevent any disease also from some chronic disease like Diabetes type 2. 'Food choices are the first step in prevention through diet. To prevent diabetes, it is seen that white flour, white rice and white sugar also sweet beverages or drinks with added sugar and red meat are high-risk factors for diabetes; these foods have to be avoided or are not taken excess by well-being or a prediabetes

The items which are healthy and can reverse prediabetes include fresh green vegetables they can bring a 14% decrease in the risk of diabetes type 2, non-starchy vegetables that include onions, garlic peppers etc. these have fibres and phytochemicals, which are essential for a healthy body, beans and legumes are the good source of carbohydrates other than processed carbohydrates items, nuts and seeds are the anti-inflammatory and are preventive in the insulin resistance, they also help in weight loss because obesity contributes in getting diabetes type 2. Fresh fruit is rich in health, especially those containing fibre and antioxidants. The research found that in each day, three servings of fruits decrease 18% of diabetes type 2 risks' (Fuhrman, 2018).

Conclusion

In the research topic, the relationship of ethnicity had been seen with diabetes type 2. Ethnicity is the identity of an individual with respect to its nationality, culture, religion, belief, norms, languages, and values, which differentiate it from other individuals. Individuals of the same ethnicity, when they live together, form a society of one ethnicity which then become the identity of that society. It had been seen that diabetes type 2 is a worldwide disease and had now occurred in people of every ethnic group, but it had been more common in black Americans, Hispanics, South-Asians, individuals of Africans and African Americans.

There had been some conditions when the sugar does not control then doctors prefer injective insulin to the diabetes type 2 patients. There had been many ethnomedicinal treatments for diabetes type 2. In the Holy Quran, there had been some verses by which the patients who had faith can get treatment. Other than this, there had been some herbs that can be used for the control of sugar level. Along with all these treatments, precautionary measures had also taken for the control of the disease.

Diabetes type 2 is common in some ethnic groups, as discussed above, and also, there had been some ethnic food items which include those items which had not been taken by a diabetes type 2 patient. From the all above discussion, it is concluded that the use of red, processed meat, processed carbohydrates in the form of white wheat, white sugar, white bread, sweetened soda, saturated and trans fats when used in the food either that food is ethnic food, for the cultural appreciation increased the risk of diabetes type 2.

Diabetes type 2 is a lifelong chronic disease it cannot be cured, but sugar level can be controlled through treatment and some precautionary measure to spend a better life. Diabetes type 2 is non-insulin-dependent; in this disease medicines are preferred mostly metformin or its products like Glucophage or Getryl are used mostly in the beginning. Ethno medicines are also used for the treatment of diabetes type 2. Despite of all these treatment and precautionary measures if the sugar level does not control then injective insulin should be used.

References

- Chege , I. N., Okalebo, F. A., Guantai, A. N., Karanja , S., & Derese, S. (2015). Management of type 2 diabetes mellitus by traditional medicine practitioners in Kenya- key informant interviews. *The pan African medical journal*, 22(2), 22.
- Chin, C. Y., Ming , K. E., & How, C. B. (2011). Does religious affiliation influence glycaemic control in primary care patients with type 2 diabetes mellitus? *Mental health in family medicine*, 8(1), 21-28.
- Cotey, S., & Harris, A. (2017, July 11). How to reduce your risk of diabetes: Cut back on meat. Retrieved from Cleveland clinic: <https://health.clevelandclinic.org/how-to-reduce-your-risk-of-diabetes-cut-back-on-meat/>
- Diabetes.co. (2019, January 15). Polycystic ovary syndrome (PCOS). Retrieved from diabetes.co.pk: <https://www.diabetes.co.uk/conditions/polycystic-ovary-syndrome.html>
- Eller, J. D. (1999). *From culture to ethnicity to conflict: an anthropological perspective* (Vol. 3). Michigan: The University Michigan Press .
- Erikson, T. H. (2002). *Ethnicity and nationalism: anthropological perspectives* (2 ed.). London: Pluto press.
- Fisherman, J. A. (1980). Social theory and ethnography. In F. Colman, *In ethnicity diversity and conflict in eastern Europe* (p. 345). Santa Barbar CA: Peter sugar.
- Ford, M. (2014, June 30). What is the distinction between 'ethnic' food and non-'ethnic' food? Retrieved from Quora: <https://www.quora.com/What-is-the-distinction-between-ethnic-food-and-non-ethnic-food>
- Fox, R. (2015). Food and eating: An anthropological perspective. *Social issues research centre*, 12(4), 1-22.
- Fuhrman, J. (2018, April). How to eat to reverse and prevent diabetes (5 foods to eat and 6 to avoid). Retrieved from Food revolution on nework: <https://foodrevolution.org/blog/how-to-eat-to-prevent-diabetes/>
- Geertz, C. (2012). Anthropological perspectives on ethnicity. In R. Scupin, *Cultural Anthropology- A Global perspective* (p. 354). Lindenwood University: Pearson.
- Gomez, M. (2016, August 18). Final project Diabetes. Retrieved from Anthropology.msu.edu: <http://anthropology.msu.edu/anp204-us16/2016/08/18/final-project-diabetes-2/>
- Goran, M. I., Ball, G. D., & Cruz, M. L. (2003, April 01). Obesity and risk of type 2 diabetes and cardiovascular disease in children and adolescents. *Journal of clinical endocrinology and metabolism*, 88(4), 1417-1427.
- Hostler, J. A., Kephart, W. M., & Zellner, W. W. (2012). Ethnicity. In R. Scupin, *Cultural Anthropology- A Global Perspective* (p. 53). Lindenwood University: Pearson.
- Hutchinson, J., & Smith, A. D. (2012). Ethnicity. In R. Scupin, *Cultural Anthropology- A Global perspective* (p. 353). Lindenwood University : Pearson.
- Kleinman, A. M. (2009). Ethnomedicine. In M. Winkelman , *Culture and health: Applying Medical anthropology* (pp. 55-65). San Francisco: Jossey-Bass- A wiley imprints.
- Le, C. B. (2017, January 7). What food tells us about culture? Retrieved from Freely Magazine: <https://freelymagazine.com/2017/01/07/what-food-tells-us-about-culture/>
- Lumen. (2018). Cultural anthropology. Retrieved from Lumen learning.com: <https://courses.lumenlearning.com/culturalanthropology/chapter/ethnicity-race/>
- Marengo, K. (2018, December 18). How soda impacts diabetes risk. Retrieved from Medical news today: <https://www.medicalnewstoday.com/articles/259604.php>
- McQuillan, S. (2016). Diabetes diet: Create your healthy eating plan. Retrieved from Mayo Clinic : <https://www.mayoclinic.org/diseases-conditions/diabetes/in-depth/diabetes-diet/art-20044295>
- Oldroyd, J., Banerjee, M., Heald, D. A., & Crickshank, K. (2010). Diabetes and ethnic minorities. *Postgraduate medical journal*, 81(12), 958.

- Raddcliffe, S. (2013, November 13). Four food choices That Greatly Increased your Diabetes Risk. Retrieved from Healthline: <https://www.healthline.com/health-news/food-four-food-groups-that-raise-diabetes-risk-111313#1>
- Rickford, J. R. (1997). Suite for ebony and phonics. *Discovery*, 18(2), 82-87.
- Scupin, R. (2012). *Race and ethnicity: anthropological and sociological perspectives* (2 ed.). Lindenwood: Pearson prentice Hall.
- Sissons, C. (2019, april). Can eating too much fruit cause type 2 diabetes? Retrieved from Medical news today: <https://www.medicalnewstoday.com/articles/323310.php>
- Smith, M. L. (2012). Ethnicity. In R. Scupin, *CulturalAnthropology- A Global perspective* (p. 354). Lindenwood University: Pearson.
- Vann, M. R. (2016, february 6). How ethnicity affects type 2 diabetes risk . Retrieved from Everyday Health: <https://www.everydayhealth.com/type-2-diabetes/ethnicity-and-your-diabetes-risk/>
- Verren. (2018). Race and ethnicity. Retrieved 2018, from The New York times: <https://www.nytimes.com/topic/subject/race-and-ethnicity>
- Weisenberger, J. (2012). *Diabetes weight loss: Week by week: A safe, effective method for losing weight and improving your health* . USA: American diabetes association.
- Winkelman, M. (2009). *Culture and heath: Applying medical anthropology*. San Francisco: Jhon wiley and sons.