



Injera. An Ancient Food Medicine in East Africa, Ethiopia

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Abstract: *This paper explores an ancient grain, Teff, used to make the staple food namely injera in Ethiopia. Teff is a tiny grain contains iron in rich. However, Teff production is limited to certain middle elevations and regions with adequate rainfall, so it is relatively expensive for the average household. The primary agent responsible for fermentation of teff flour as used to make “injera,” the Ethiopian national bread, was identified as Candida guilliermondii (Cast.) As many farmers in the Ethiopian highlands grow their own subsistence grain, wheat, barley, com, and/or rice flour are sometimes used to replace some or all of the teff content. In making injera, teff flour is mixed with water and allowed to ferment for several days, as with sourdough starter. As a result of this process, injera has a mildly sour taste, somewhat similar to South Indian dhusa. The injera is then ready to bake into large flat pancakes to be consumed with a variety of meat and vegetable dishes. This is done either on a specialized electric stove or, more commonly, on clay plate (Amharic mitt ad, Tigrinya mogogo) placed over a fire. Unusual for yeast or sourdough bread, the dough has sufficient liquidity to be poured onto the baking surface, rather than rolled out, again similar to a large dhusai. The bottom surface of the injera, which touches the heating surface, will have a relatively smooth texture, while the top will become porous. This porous structure allows the injera to be a good bread to scoop up sauces and dishes. Due to presence of minerals and nutrients, this food is primary food in Ethiopia especially for children’s to control malnutrition and is a classic example of a food medicine.*

Key words: dabo, pasta, injera, inkulal, asha dullet, kaiwait, takabino, marr, mitmita, salata, fiber, injera.

Introduction

Injera sometimes also written as Enjera, the term is called by the official language of Ethiopia, Amharic. Injera is made from teff a widely known crop around most of the Ethiopia. Teff is usually grown in highlands and mid altitude environments where there is adequate amount of rainfall during the Ethiopian summer/rainy season. Teff scientifically termed as *Eragrostis teff*, but the etymological meaning is derived from the term tefa (lost) which infer the tiny nature of the crop. Teff has an

important nutritional value being high in containing fibre & iron and providing protein & calcium which are essential for human health & development.

For almost most the people in Ethiopia, injera is a common food like a staple food which is also the preference of most people on their diet each every day. Teff has a lot of variation in like white teff /nech tef/, mixed teff /segegna tef/, and red teff /key tef/. The consumers of injera/teff have a great preference for the white

teff/an injera made from white teff over the other colour varieties. Sometimes injera is also made from mixing teff with

other cereals, like wheat barley & rise/ruz.



Figure 1: The Researcher (Dr. G. Ravi Kumar) interviewing regarding the teff and its cultivating methods with the local former namely Zemedkun of Bahairdar area in East Africa, Ethiopia.



Figure 2 – Injera making teff grain plant

In making of injera, teff flour is mixed with water and allowed to ferment for several days, as with sourdough starter. As a result of this process, injera has a mildly sour taste. The injera is then ready to be baked into large, flat pancakes. Unusual for yeast or sourdough bread, the dough has sufficient liquidity to be poured onto the baking surface, rather than rolled out.

In terms of shape, injera cooked in a circle and used as a base for other foods. The taste and texture. The bottom surface of the injera, which touches the heating surface, will have a relatively smooth texture, while the top will become porous. This porous structure allows the injera to be a good bread to scoop up sauces and dishes.



Figure-3: The local farmer explaining about teff to the Researcher

Objectives

The main objectives of the paper are:

1. To document the preparation and mode of consumption of injera
2. To identify the nutritional values of injera

3. To know the traditional medicinal values of injera and
4. To indigenous farming methods practiced in the cultivation of teff.

Methodology

The study is qualitative anthropological study. The main research tools for the collection of data were participant and



non-participant observation, formal and informal interviews focus groups discussions were used. The informants were selected randomly in regions namely Amahara, Oromo and Afar.

Data collection for indepth study was collected in the hotels in the urban and rural areas namely Logia, Samara, Dupthi, Woldia, Dresse, Bahirdar, Debretabor, Debremarkos area and Gondar etc.

Preparation and consumption of *INJERA*

A traditional food of injera is served with different kinds of wot, like key wot, alcha wot, doro wot, siga wot, shiro wot, with a plate. Most of the time in Ethiopian way of eating injera will be placed on the plate under the wot. Injera is used as a meal as well as a meal utensil & plate since it carried different kinds of on it.

Once the injera was baked it can last over for 3 days without any kind of damage & loss of its quality, especially if the weather is moderate in temperature & will likely to be consumed until it comes to be perished.

Indigenous cultivation of teff :

Teff, the world's smallest grain, plays no small role in Ethiopia's agricultural sector— 65 percent of Ethiopia's 85 million people get their "daily bread and livelihood" from it. In Ethiopia, farmers dedicate more land to this crop. Teff is mainly available in three varieties i.e white, red and brown. People gives first preference to white teff but it grows only in certain regions of Ethiopia. *Red/brown teff*, the least expensive and least preferred type but the consumption of red teff is most prevalent. The third main

type of teff is *mixed* (red/brown and white).

The farmers told that the Ethiopians having two agricultural seasons namely belg (March/April to May/June) and meher (July/August to September/October). The cultivation of teff is suitable during meher season in highland areas. The harvesting of teff typically happens from october to December. For cropping of teff, a wide area of land that was prepared by the labour power of animals & farmers needs careful consideration of the upcoming season. Teff cultivation requires eight ploughings. Repeated ploughing destroys weeds, breaks and softens the soil, and increases the water-holding capacity of the soil. Before sowing the seed, teff fields are often trampled by cattle. The gaps between rows are also levelled, and grasses and other plant residues are removed. If teff fields are not trampled, the tiny teff seeds will be buried under the soil and weeds will dominate the crop within two or three days after sowing. Trampling on waterlogged lands will bury the soil under the surface water, and for this reason waterlogged fields are not trampled.

In Ethiopia farmers know the very best time for planting the teff seeds on a bare land & they identified two important seasons which are suitable for the effective production of teff, Specially they planted the seeds in the spring & summer seasons of Ethiopia. The sow seed will be available for harvesting within three months of after plantation of the seeds. Teff can be stored for a long time in a warehouse, if it was kept away from moisture & wet areas.



Injera is an Ethiopian and Eritrean favorite traditional food. They are found of eating thrice in a day they eat this food mixing non-veg like meat items that is kaivat, tips, kalila tips, dorovit. Inkulal sirsir, inkulal firfir, asha tips.

Vegetarian food like dabo, injera, injera thakabino, salata, siro process, and mitmita birbure etc.

This injera is compared to Indian paper dosa which is round and thickly but it has a special feature that is, it is as smooth as cotton. People eat it irrespective of their age and it is easily digestible. Injera content of iron calcium proteins and fiber is abundant and it improves blood or hemoglobin in the people who are anemic

The structure of Injera is round and weight around 300 grams to 400 grams each based on preparation.

Cropping method:

The approximate duration of the cultivation of injera is ranges from 120 to 130 days just like the crop of paddy in India. The (injera) crop is based on rains and the use of pesticides is very rare. It is harvested after cropping and the seed of injera is just like ragi seeds these seeds are preserved for a long time and is taken as food. It is of two types one is in the color of wheat and the other in the color like coffee seed. injera which is in the color of wheat is taken high percentage, the other type is available at few places such as star hotels, restaurants etc.

Nutritional status and Medicinal values of injera

Original to Ethiopia, teff is a super food: gluten-free, high in fiber, packed with

essential nutrients, such as iron, calcium, protein, and vitamin C. But, while teff is the second most consumed crop in Ethiopia, it is also the most expensive cereal on the market.

In injera is a high carbohydrate like iron, calcium, vitamins. Personally I am taken daily. It is improve blood circulation.

Interviews were conducted with households in logia samara afar regional state in east Africa, Ethiopia. The translations of interviews are presented in the following sections.

Interview with the person No 1:

I interviewed the Balayenesh she is living in logia samara ganda afar regional state in Ethiopia she is give more information about injera. Injera is a easily digestion food for all age groups. She is preparing very well in injera for home purpose and sometimes commercial purpose.

Injera is like cotton it is eating for all age groups if it eating the injera body becomes very smart, digestion very thoruno (thoruno means very nice it is Ethiopian word)

Interview with the person No 2:

The person Jenbech nazaratah kuterand nazarath kuterwullet hotel owner it is large hotel restaurant in logia. In Ethiopia maximum to all people using injera food. Most of the time all they prefer injera and tips. In some times injera thakabino it is general food in Ethiopia people.



Interview with the person No 3:

I am selling only injera told a woman at in the hotel in her local language as 'bicha sir Leila ellam'. She sell the combination foods with the injera such as *asha*, and *doro*. The customers mostly prefer these combination curries with injera.

Food items in different hotels in samara and logia

1, hotel nagarath kuter and (nagarath hotel 1) kuter ulat in logia

Vegetarian items

1. Injera thakabino
2. Injera siro process
3. Salata and ruce
4. Dabo
5. Dabo and orgoo
6. Injera and mitmita and burbure
7. Kita fir fir
8. Kita and marr
9. Dabo and marr
10. Mixed vegetable ruce
11. Pasta.

Non vegetarian items

1. Tips
2. Sheep kaiwaith
3. Inkulal firfir
4. Inkulal sirsir
5. Asha dullet
6. Asha tips
7. Doro

Preservation

The cooked injera preserved for 3 to 4 days for later consumption. Traditionally the injera preserved in bamboo baskets. They placed the injera

consisting basket in open air allowing areas or hanged at air allowing open place inside their home.

Marketing specialty in injera

1. In Ethiopia each and hotel outlets available but rate is different.
2. In rural areas(kebele) injera price is very less it around 5 birr to 7 birr for example I am visit in dupthi in(afar regional state)in injera include thakabino price is 15 birr.
3. In cities that means woreda capital like nazaraet(adama) the price rate is 30 include thakabino.

Conclusion

To the best of my knowledge I conclude in injera are high nutrititional range values, for all age groups daily. Because it is a traditional food for Ethiopian people.

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