EATING AS FOOD OR MEDICINE: LOCAL FOOD AND HEALTH IN A RURAL VILLAGE IN AMHARA REGION, ETHIOPIA

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ABSTRACT The boundaries between food and medicine are not clear in many societies. This article provides an example of local food practices and perceptions that relate to health in a village in Amhara region, northwestern Ethiopia. It examines the relationship between food and health describing people's narratives and their practices with two local fermented foods, a side dish made of cottage cheese and spices called *mät'at'ayb*, and a home-brewed alcoholic beverage called *t'ālla*, which are referred to as "good for health [*lāt'ena yahonal*]." Respondents judged the benefits of the foods on the basis of their ingredients, flavors, and how they were made, by considering factors that went beyond their direct impact on health conditions in biomedical and nutritional terms. Learning about actual food habits and perceptions can lead us to a deeper understanding of health tips.

Key Words: Food and medicine; Local foods; Health; Amhara; T'älla; Mät'at'ayb.

INTRODUCTION

Previous studies have explored the boundaries between food and medicine, and have pointed out that these two were not clearly divided in many societies. Ethnopharmacological and ethnobotanical studies have focused on the knowledge of the medicinal and/or nutritional functions of raw materials, whether plant, animal or mineral, and their utilization by groups of people. Raw materials can be given various forms, depending on their intended purpose and the way that they are processed (Etkin, 2002: 81). In other words, they can appear both as dietary ingredients and as elements of pharmacopeia in treatment of diseases (Etkin & Ross, 1982: 1559).

However, food refers to cooked or processed things as well as raw materials, and people's perceptions on a dish and its individual ingredients are not always the same (Madsen, 1955; Quinlan & Quinlan, 2006). Cultural anthropological studies of food in relation to traditional medical systems, whether ancient Chinese, ancient Greek, Islamic, Ayurvedic, or other established bodies of thought from around the world that rely on the distinction between the hot and cold categories in food tend to examine the final dish and not merely its raw materials (Manderson, 1987; Chen, 2009). In these studies, issues of the boundary (or lack thereof) between food and medicine have been analyzed as a part of a whole system. The complexity of the relationship between food and medicine in such systems derives from the concept of the medicinal dish or food therapy, which rest on the balance between the human body and the environment. However, they have not deeply

involved in how the individual dish is cooked.

In some cultures, as in contemporary rural Ethiopia, in which such theories of functional food have not developed into complex scriptures, meals are often thought of in connection with health as well (Balemie & Kebebew, 2006).

Many studies have examined cuisine in Ethiopia, and most have concentrated on food processing techniques and food safety in domain of biochemistry and microbiology (O'Mahony, 1988; Ashenafi, 1990; Idris et al., 2001; Berza & Wolde, 2014; Lee et al., 2015; Getahun et al., 2019). These works have contributed to the standardization of recipes, improving food manufacture and the safe production of Ethiopian traditional food. These studies, however, do not focus on the daily life of the lay people who eat the food and thus obscure the reality of eating. Little has concerned "... the complexity and varied nature of common cookery in everyday practice" (Lyons, 2007: 348) from the perspective of social science (Sunano, 2019). The food of Ethiopia has been overlooked by medical anthropology, in spite of its importance for the most basic daily needs, activities, and perceptions that relate to health.

This article examines how rural Ethiopians understand common meals that they refer to as "good for health [*lä t'ena yəhonal*]" together with a description of how they are made. First, this article investigates common home-cooked meals and only discusses their raw materials, in contrast with previous studies that have focused on precise species of medicinal plants and their utilization rather than the broader context of cooking or meals (cf. Etkin & Ross, 1982; Jennings et al., 2015).

In the cultural contexts of the research area, food is understood in terms of health in a roughly bifold division of aspects: on the one hand, there are the ingredients and preparation of the food, and on the other hand, there are the beliefs associated with the Ethiopian Orthodox Church. This article generally restricts itself to the former. Thus, the author first provide an overview of eating culture in the research area, and then she considers the relationship between the food and health [t'ena]⁽²⁾ using narratives provided by individuals and their behaviors to present two local foods, mät'at'ayb (a side dish of cottage cheese and spices) and t'älla (a home-brewed alcoholic beverage).

RESEARCH AREA

This study was carried out in one of the 43 administratively designated villages of the Mecha district in the Amhara region, here called E village. The district of Mecha is located 520 km northwest of the capital Addis Ababa in Ethiopia's northwest highlands, 35 km southwest of Bahir Dar, the capital of the Amhara region, at an altitude of approximately 2,000 meters above sea level. The average daily temperature is in the range of 14–17°C. Each day exhibits a wide range of temperatures; in the day, it 28°C during the day, and it drops below 10°C after sunset. Annual precipitation is about 1,800 mm, and most of it falls during the rainy season, from June to September. The residents of E village are the Amhara and speak Amharic, the country's official language. The district is overwhelmingly

Ethiopian Orthodox (98%). The town of Merawi is the capital of the district (population approximately 18,000), and it has basic public facilities, including a district office, schools, a health office, a health center, and a hospital. E village is 3 to 10 km south of Merawi. According to the National Census of 2007, the total population of E village is 6,689, of which 3,356 are male and 3,333 are female (Central Statistical Agency, n.d.). E village includes seven sub-administrative villages [gots], and this study was conducted in the T got, which has an estimated population of 1,100 (according to 2011 data from the district office). The dominant occupation in E village is crop farming, and most grow finger millet [dagusa] (Eleusine coracana) and corn [bok'olo]⁽³⁾ (Zea mays) for domestic consumption. Two types of finger millet are grown in the village, one with black seeds, and the other with a mixture of black, red and, and white seeds. These are called black millet [t'ak'ur dagusa] and white millet [näch' dagusa], respectively. Both are the ingredients for *ənjära*, a staple food. Teff (Eragrostis tef), a staple throughout Ethiopia is rarely cultivated here, although it was a main crop till 15 years ago. (4) The reason for choosing finger millet instead of teff as their main crop is explained by locals by the greater yields of finger millet and the fact that teff is not an ingredient in t'älla. (5) Eucalyptus [bahər zaf] is being grown more often, as a cash crop. Some households stopped growing finger millet and have converted their agricultural land to eucalyptus forest. Some are growing gesho (Rhamnus prinoides), a main ingredient of locally alcoholic beverages, and coffee trees [buna] (Coffea spp.), pumpkins [duba] (Cucurbita spp.) in the backyard as supplemental food items, but they are not enough for consumption. Food items such as peas [atär] (Pisum sativum), onions [shənkurt] (Allium cepa), potatoes [dənch] (Solanum tuberosum), edible oils [zäyt], spices [k'əmäm], a mixture of gesho leaves and barley malt and other daily commodities are bought at the market in Merawi.

Everyday life follows the calendar of the Ethiopian Orthodox Church. Ceremonies are often performed on holidays [bäal] either at the church or at home. There are about 180 fast [ts'om] days required annually for the lay people by the church. (6) On these days, people are urged to abstain from eating and drinking from 10:00 pm the previous day until 3:00 in the afternoon of the fast day, (7) but in practice, it is left to the discretion of the individual. They do not consume any animal products during fast; on the morning of the first day of fasting, women wash their utensils and dishes with the hot water. If a dish prepared on the previous day contained butter, all dishes must be thoroughly washed.

RESEARCH METHOD

This article is based on ethnographic fieldwork conducted in E village over a period of about 14 months in total, done intermittently between September 2017 and October 2019. A qualitative approach was adopted to acquire an in-depth understanding of daily activities and perceptions relating to food and health. Interviews were carried out with the members of 17 households, especially with the women who were responsible for preparing the food. Direct observation and

interaction were performed through regular visits and informal conversation. Further interviews with three women in Merawi town and four people (two women and two men) in the city of Bahir Dar were also performed to form a comparison with the villagers' reports.

OVERVIEW OF FOOD IN THE VILLAGE

Three meals are usually taken on non-fasting [gədəfət] days: breakfast [k'urəs], lunch [məsa], and dinner [ərat]. Snacks [mäkəsäs] are often eaten at any time between meals. A sourdough-risen and spongy flatbread [ənjära] and a stew or soup-like side dish [wät'] are eaten at every meal. Snacks may be the same things as are eaten in the main meal, or they may include other food, such as boiled [nəfəro], roasted [yä tät' äbäs bok'olo] and fried [bok'olo k'olo]) corn. The most common side dishes include k'äy wät' and shəro wät'; k'äy wät' is a red, stew or soup-like dish and is normally served with ənjära at least once a day. This dish is named after the color red [k'äv], and its hue comes from a red, pastelike seasoning called ch'äw, (8) a mixture of water and grinded spices, that gives the particular flavor of wät'. Red wät' with ch'äw is called k'äy wät' whatever ingredients it contains. In the village, the most common k'äv wät' is called k'äcch'ən [thin or watery] wät', made with peas or grass peas. Another very common dish is sharo wät', eaten especially often for breakfast. Here sharo is the name of the flour, made of roasted ground peas and grass peas, mixed with spices. While k'äy wät' takes at least an hour to prepare, shəro wät' can be prepared in 20 minutes, by slowly adding the sharo flour into the boiling water and briskly stirring until the mixture is smooth, then adding salt to taste.

Well water is drunk in E village,⁽⁹⁾ and the home-brewed alcoholic beverage *t'älla* is often drunk as well. Most people drink it throughout the day, at meals, during breaks in farm work, at church events, during social or family visits, and at any time to quench one's thirst.

In E village, $\partial nj\ddot{a}ra$ and $\ddot{w}\ddot{a}t'$ with $\ddot{c}h'\ddot{a}w$ are eaten every day, and $\ddot{t}\ddot{a}lla$ is likewise drunk every day. If a family owns a cow that has a calf, the dairy products sour milk $[\partial rgo]$, butter $[\dot{k}'ebe]$, and cheese [ayb] are available. In addition, families distill spirit called $\ddot{a}r\ddot{a}k'e$ once or twice a week to sell for cash income. All of these are fermented foods. To make them, specific tasks have to be undertaken at the appropriate times, and these items must be carefully matured and preserved without allowing decay. The everyday life of the women in the village is affected by the care for fermentation.

Villagers in E village often describe their usual food as "healthy [*lä säwnät yəhonal*, lit. 'good for health']." What does this expression mean? To present the idea represented here, the next section provides narratives and descriptions of behavior related to two typical fermented foods.⁽¹¹⁾

LOCAL FOODS LÄ SÄWNÄT [FOR THE BODY]

Mät'at'ayb

A local specialty is the side dish called mät'at'ayb,(12) made from homemade cottage cheese [ayb] and spices and herbs $[k'am\ddot{a}mwoch]^{.(13)}$ It is served for breakfast or as a snack with coffee [yä buna k'urəs], especially during the cerebrations that do not fall on fast days.

The preparation is described below. Lightly roasted ground seeds of Ethiopian mustard [gomänzär] (Brassica carinata) and coriander [dəbəlal] (Coriandrum sativum) are placed in cottage cheese two or three days after it is separated from the milk, and then it is put into a container made of a calabash $[k'\ddot{a}l]$, and sealed. (14) This is done to preserve the cheese. When the calabash container becomes full after more cheese is deposited, they take the cheese out and mix it with spices and knead it in a basin with both hands until the contents are mixed together. They mold the mixture into oval balls with a diameter of 7-10 centimeters and that are about 15 centimeters long, then the balls are placed in a clay pot [madəga] and sealed. The pot is left for more than a week to let the mixture mature. Villagers report that the mixture is immature [läga] and does not taste good [avt'aft'm] for the first one week after being placed in the pot. After this, only the amount that is to be eaten is taken from the pot, and water or cow's milk is added, and it is seasoned to taste with a mixture of grained spices [bärbäre], (15) sharo flour, and spiced butter and whipped until smooth. It is eaten dropped or spread on the *ənjära*.

In E village, there are a few households with more than eight cattle, and there are even fewer milk cows. Milk is accordingly not always available, and both cottage cheese and mät'at'ayb are considered valuable. However, while cottage cheese is only edible for about seven days, mät'at'ayb can be preserved for years without decay, so long as it is stored properly. After six months, mät'at'avb becomes dehydrated and turns to solid or powder.

The author interviewed to 16 local residents (2 women in their 30s, 5 women in their 40s, 2 women in their 50s, 4 women in their 60s, 1 woman in her 80s, 1 man in his 20s, and 1 man in his 50s) on the types of spices and herbs used to make mät'at'ayb. In all, 22 varieties of spices and herbs available in the area were mentioned: (16) Ethiopian cardamom [korärima] (Aframomum korrorima), onion, garlic [näch' shənkurt] (Allium sativum), Ethiopian mustard, chili pepper [k'arəva] (Capsicum annuum L.), true cinnamon [k'äräfa] (Cinnamomum zeylanicum), coriander, cumin [kämun] (Cuminum cyminum), turmeric [ərd] (Curcuma longa), fennel [ənsəlal] (Foeniculum vulgare), koseret [kosärät] (Lippia abyssinica), nutmeg [gawəz] (Myristica fragrans), black carawey [t'ək'ur awäsäd] (Nigella sativa), Ethiopian basil [zəkakabe] (Ocimum basilicum L.), long pepper [t'əməz] (Piper longum L.), black pepper [k'undo bärbäre] (Piper nigrum), fringed rue [t'enadam] (Ruta chalepensis), clove [k'ərnfud] (Syzygium aromaticum), Abyssinian thyme [t'oshəny] (Thymus schimperi), ajwain [näch' awäsäd] (Trachyspermum ammi), fenugreek [abəsh] (Trigonella foenum-graecum), and ginger [zənjəbl] (Zingiber officinale). (17)

The respondents divided the spices and herbs into three types: necessary [yä gədə], not necessary but allowable [yä gədə yaləhonä], and unwanted [mäch'ämär yäläbätəm]. What rated as allowable varied among respondents, but what was reported to be necessary was generally similar for all. Garlic, ginger, fringed rue, and Ethiopian basil were all considered necessary, and all except one male in his 20s considered Ethiopian mustard and coriander to be necessary. Garlic, ginger, fringed rue, and Ethiopian basil differed from Ethiopian mustard and coriander in terms of the purpose as well. The former four kinds were said to be vital for making mät'at'ayb, but the latter two were considered important for preserving cottage cheese from decay before the mät'at'ayb is made. Respondents considered that all the 22 of the listed spices and herbs improve the flavor of the food and are good for the body, but the four kinds listed here were all discussed in terms of their effectiveness against the sickness.

Garlic is the most useful (of all the spices). It can be used for *ch'äw* and *aləch'a*.⁽¹⁸⁾ It makes *wät'* taste good, and it is good for the body. It is said that garlic wards off 24 kinds of diseases [*bäshətawoch*]: the common cold [*gunfan*], asthma [*asəma*], malaria [*wäba*], and the evil eye [*buda*].⁽¹⁹⁾ I forget the rest, but it is a medicine for many diseases. (AM, female, 40s)

If you dry fringed rue and garlic and pound them into powder, the result is a medicine to exorcise the evil eye. It is to be inhaled through the nose. If it is boiled, it can be an oral liquid medicine. (KT, male, 50s)

Have you caught a cold? Then crush fringed rue, garlic, and ginger, simmer them in water, and drink it. You will get better. (G, male, 60s)

Garlic, ginger and fringed rue are the main spices. We can use them in any dish, and Ethiopian basil too. The most important is garlic. It makes food taste good, and it is beneficial for the body. (AA, female, 50s)

As these narratives show, people use spices and herbs that are commonly used as condiments for treating sickness as well.

The health benefits of *mät'at'ayb* were referred to the spices: *mät'at'ayb*, they said, is good for one's health because it has a lot of spices in it. However, they specifically referred to its effectiveness in association with its storage period.

After more than six months, it becomes powder [duk'et]. If it is kept for more than a year, it becomes medicine [mädəhänit]. You can eat it as food [məgəb], but we usually use it as medicine. When you have a stomachache [hod k'urət'ät], you should eat as it is or eat with ənjära. (G, male, 60s)

After the cottage cheese and spices have been mixed together, for about two weeks, a pungent odor develops. After one month, the smell becomes mild [läsəlasa] and sweet. The color becomes dark [t'ək'ur]. I used to have

seven-year-old mät'at'ayb. It was good medicine for the stomach [lä hod mädəhänit]. (ST, female, 40s)

It tastes good after being stored for more than two months. After six months, it is medicine. I like mät'at'ayb that is up to six months old the best. After a year or two, it becomes dark. It is a very good medicine. (GM, female, 40s)

Once it is six months old or older, mät'at'ayb is medicine. It cures out ascaris [kosso] and tapeworm [wosfat]. We use it for humans and for our cattle. I have mät'at'avb that is two years old, let me give you some. If you have a problem with your stomach, take a small piece of this on an empty stomach in the morning. (MM, female, 60s)

When it is two or three months old, mät'at'ayb is delicious [yt'omal]. After one or more years old, it is medicine. It is used for malaria. After it is preserved for a long time, it becomes very dark, and the taste becomes bitter. This bitter mät'at'ayb is no longer food [məgəb ayhonəm], but it is very good medicine. (YZ, female, 40s)

After six months, mät'at'ayb gets dry [ydäräk'a]. It is delicious. It is always good for the body [lä säwnät yəhonal] after two weeks, but after one month it is especially effective as medicine for stomach problems [lä ch'ägwara həmäm]. (AM, female, 40s)

Aged mät'at'ayb for as long as one year has been medicine, although recently I haven't been using it as frequently because we can get medicine [känina] at the hospital now. (ZT, male, 50s)

As these narratives show, the maturation period of mät'at'ayb with its flavor [t'am], dryness [däräk'/ərət'əb], and smell [shəta] is considered important for its effectiveness for the body. Because the respondents distinguished between mät'at'ayb as food [məgəb] and that as medicine [mädəhänit], the author also asked them to describe the difference between them. Two points emerged from all: mät'at'ayb aged over six months or a year is effective for treating sicknesses, and aged mät'at'ayb can be eaten as food [məgəb] so long as it tastes good. In other words, they assessed its effectiveness for treating sickness on the basis of the time it had aged, and they judged whether they eat it as food or not on the basis of taste. As it gains bitterness and loses good flavor, it loses its food role and becomes only used to treat sickness. They use the word medicine [mädəhänit] to separate the type of mät'at'ayb that treats disease from the more recently made mät'at'ayb, which is just considered healthy.

T'älla

Ethiopians brew the t'älla throughout the country. (20) Although it is generally described as homemade beer, the ingredients used and the way it is made varies among localities, ethnic groups, and even individuals. In the research area, barley, corn, finger millet, and $gesho^{(21)}$ leaves are the most common ingredients. Barley is a main ingredient in other parts of Ethiopia, the most important cereal for taste, according to residents of E village, is finger millet. Furthermore, only black finger millet is used for making t'älla. The author asked the village women who made t'älla on a regular basis about the color of the seeds they used, and all of them answered that they only used the black ones. The white one should not be an ingredient. They said that white finger millet could not make t'älla taste good [ayt'afat' ayamarayamarayam] and does not absorb the water [ayaha ayanayamarayam].

The following is an example of people's typical perception on $t'\ddot{a}lla$ and health.

The author's neighbor, Mr. T, was prescribed a medicine for asthma at the governmental hospital in Merawi. The doctor told him refrain from alcohol for a while, including *t'älla*, and Mr. T followed that advice. His wife reported, "My husband does not drink *t'älla* now, so he is becoming weak. He is very thin."

This illustrates how people relate to the daily consumption of *t'älla* and their health conditions. Before discussing people's perceptions further, a typical recipe for *t'älla* is given, derived from the reports of seven women (six in E village and one in Merawi). These women distinguished necessary [yä gədə] steps from optional [yä gədə yaləhonä] ones, and the necessary steps were common to all the respondents. The following summary includes only the necessary steps.

The brewing of *t'älla* can be roughly divided in four steps: 1. malting [yä bək'əl səra], 2. enkuro work [yä enkuro səra], 3. däräk'ot work [yä däräk'ot səra], and 4. dilution [yä bät'ä bät' səra].

The malting is the process of saccharification, in which the starch in the grains is converted into fermentable sugar and then the first fermentation is performed. Finger millet and corn are soaked in water for one or two days, and are left in a dark place inside the house for a few days. As they sprout, they are sun dried. The resulting plants are ground into flour with barley malt and dried *gesho* leaves and mixed with water and then left again for three or four days to ferment inside a clay pot [madəga]. (22) The result is the wort [bərəz]. (23)

The second step, *enkuro* work is the preparation of starches. Some water is added to either or both of corn and finger millet flour, and it is kneaded to the point of having some small lumps in the batter. Then, it is left overnight in a bag to ferment slightly. It is fried on an iron plate until well-cooked. This cooked material is called *enkuro*. After it cools down it is added to the wort of the first step, which is already fermenting.

Then, *däräk'ot* work is done to add flavor and color to *t'älla*. Unmalted corn kernels are soaked with water for one or two days. Then, the corn is put between the iron plates and steamed. As it is thoroughly heated, the upper plate is removed,

and it is roasted until black. The result is called *däräk'ot*. It is milled with dried *gesho* leaves and barley and corn malt. After a day or two of *enkuro* work, the thick wort of step 2 is added to the powdered *däräk'ot* little by little and kneaded in a basin to make a clay-like solid. The thick solid is called *dəfdəf* [mash]. This is put into a container, sealed and left to mature. The sealing is done to prevent the inflow of air [*näfas magənyt yäläbätəm*]. The mash should be stored at in a cool place, away from direct sunlight.

Dilution is the final step before drinking. After two weeks of step 3, the container is opened and the mash of an amount that can be consumed in two or three days is taken out, and water is added and mixed in another container. The resulting liquid is $t'\ddot{a}lla$. All of the six households where the process was observed brewed twice a half year. On each occasion, 250–400 liters of fermented mash was brewed.

Villagers differentiate between the *t'ālla* that they brew and which town dwellers brew by calling them village's *t'ālla* [yā get'ar t'ālla] and town's t'ālla [yā katama t'ālla] respectively. They say that the town's t'ālla is gām [bad], but our t'ālla is shāga [good], describing differences of ingredients, processing methods, and maturation periods. This comparison illuminates what the respondents considered to be good t'ālla.

Table 1 presents a summary of the tasks that are not necessary for *t'älla* but are worth doing, according to the respondents. The task numbers 1–10 provided are for convenience. The following discussion describes the ways that the people perceive *t'älla* by focusing on the features of village's *t'älla* in particular.

| Task number | Tips for making good t'älla | Purposes | | | |
|-------------|--|----------|--------------------|-------|------------------|
| | | Flavor | Physical condition | Color | Other |
| 1 | Using finger millet for malting (step number 1) | 0 | 0 | | |
| 2 | Using finger millet for <i>enkuro</i> (step number 2) | 0 | \circ | | |
| 3 | Using finger millet for <i>däräk'ot</i> (step number 3) | 0 | \circ | | |
| 4 | Roasting <i>däråk'ot</i> untill it becomes black (step number 3) | 0 | | 0 | |
| 5 | Adding bok'k'ält in the däräk'ot stage (step number 3) | 0 | | | |
| 6 | Adding <i>mäshraviya</i> to the fermented mash (step number 3) | 0 | | | |
| 7 | Using germinated cereals for <i>enkuro</i> (step number 2) | 0 | | | |
| 8 | Adding additional <i>gesho</i> leaves in the <i>däräk'ot</i> stage (step number 3) | 0 | | | preserva tive |
| 9 | Putting <i>vernonia amygdalina</i> leaves with <i>enkuro</i> dough (step number 2) | 0 | | | |
| 10 | Maturing for a long time | \circ | \circ | | |

Table 1. Tips for making good *t'älla* with their purposes.

All six households used finger millet, corn and barley for step 1 (task number 1 in Table 1), and they used finger millet and corn for step 2 (task number 2 in Table 1). The differences between village's *t'älla* and town's *t'älla* were characterized first by the grains used in step 1.

Have you tried *t'älla* in town? It is not good. Do you know why? The women in town only use barley malt. We use finger millet, so our *t'älla* tastes good and good for the health. (AT, male, 50s)

The *t'älla* of Merawi is empty [*bado*]. It is very thin. They do not use any malt except for barley. Do you know *bira* (factory-made bottled beer)? It is also made from barley. *Bira* is, well, it is sweet ... but it does not help your health [*lä t'ena ayhonəm*]. The *t'älla* in town does not help your health or taste good. You should drink the village's *t'älla*, you will be strong [*t'änkara*] then. (A, male, 60s)

Town dwellers do not have energy [t'änkara yälum] because they only drink t'älla without finger millet. They don't mind because they do not do any farm work. Unlike them, we are robust [haylänya]. (ZT, male, 50s)

They stressed that *t'älla* made with finger millet helps build a strong body.⁽²⁵⁾ The respondents reported that the town dwellers did not use finger millet but rather corn for *enkuro* (fried grain dough), so it does not taste good. Here, it is important to see whether the *t'älla* contains finger millet or not.

In the village, a family was invited to a gathering at the home of the D family in town. After returning home, a woman from the village family described what she had seen.

How was the t'älla that was served there? Do you know the taste of t'älla? They bought it at the Merawi market. It is not made with finger millet but only corn, and it was not mature either. It did not taste good at all. I did not drink much. (TK, female, 40s)

On another occasion, after the author obtained some fermented mash in Merawi and were walking back to the village, a neighbor who was also heading to the village talked to her.

Is this mash from the town? Only corn is used for the *enkuro*. It's flavorless. It is of no use to your body. Don't drink it. If you want mash, I can give you ours. Drink the village *t'älla*. (AM, female, 40s)

The ratio of finger millet to corn for *enkuro* used by the women in five households was 1:1 (three women), 3:5 (one woman), and 1:8 (one woman). To understand the difference in town, the author asked the three women who had been living in the Merawi town for more than 30 years on the kinds of cereals they used in

step 1 and step 2. All respondents answered that they used barley and corn for step 1 and corn for step 2.

For step 3, in both the village and the town, respondents reported using corn. However, the author confirmed that village woman used finger millet to take the place of some of the corn during the fieldwork in September 2019 (task number 3 in Table 1). She explained, "If you add this (finger millet), the t'älla will improve. It will taste good and be good for the body." This suggests that people perceive the finger millet to be an important element in the taste of t'älla and for health for all the steps.

In addition to selecting of the cereals, women adopt the elaborate methods of processing grains to make good [shäga] t'älla. In step 3, the village women roast the ungerminated [yaləbäkälä] corn thoroughly, until it turns black (task number 4 in Table 1). They spend about five to six hours roasting. They judge the quality of the t'älla by its color as well as its taste, and they consider darker hues to be better. A respondent explained that "the town dwellers stop roasting before the corn turns to black, and t'älla made with such däräk'ot is light in color and tasteless."

There is another feature in the third step, where some add another type of processed corn called bokk'ält to the däräk'ot (task number 5 in Table 1). This is slightly roasted germinated corn, and it is added to give additional flavor. Further, newly sprouted seeds (the length of the sprout is three to four millimeters, and it is called bädänbə yaləbäkälä, meaning insufficiently sprouted). In addition, about two weeks after the mash is put in the container, some add another däräk'ot. This is called mäshravə (task number 6 in Table 1). Although this is done in the similar way as the first däräk'ot, they use newly sprouted [bädänbə yaləbäkälä] seeds instead of ungerminated [yaləbäkälä] seeds. They call this däräk'ot as mäshraviya, and consider it as important to make t'älla taste better.

Furthermore, one technique has to be considered unique, even among the village women. One of the six woman used germinated cereals for *enkuro* at the second step (task number 7 in Table 1), though the other five women used ungerminated cereals. The author observed that Mrs. T, whose family used germinated cereals, speaking to her neighbor Mrs. F, saying, "I use malt for *enkuro* to make the *t'älla* sweet [marmar]."

The respondents stressed the importance of these tips for the taste and color of $t'\ddot{a}lla$, and they did not refer to the effects on health in relation to step 3. However, they described $t'\ddot{a}lla$ as good both in reference to its taste and its benefits to overall health, so these tips are inseparable from tips related to the physical condition.

There are also specific considerations regarding the number of times and at what points to add *gesho* leaves (task number 8 in Table 1). Some villagers said that the town dwellers only put *gesho* in the malt stage, making their mash easily spoiled. To ensure that it keeps for long time, they consider that *gesho* leaves should be put in twice, during steps 1 and 3. After adding the *gesho* leaves to the mash, a strong, lasting bitterness develops. Many prefer a less bitter taste, and thus the mash must be left to mellow. Below is a conversation between a husband and wife.

Aya! What is this!? It's bitter $[m\ddot{a}rara]$, not tasty. Is this new $t'\ddot{a}lla$? Isn't there any previous $t'\ddot{a}lla$? (ZT, male, 50s)

The previous mash [dəfdəf] has finished. I just added gesho to this (new mash). It will be mild [marmar]⁽²⁷⁾ after two weeks. (TK, female, 40s)

Ashenafi (2006) reported that the main role of *gesho* is to add a bitter flavor to the *t'älla* rather than to control microbial growth, although the villagers themselves emphasized its role as a preservative, stating that aged and mellow flavors were preferable to bitter ones.

When the dough rests overnight in the *enkuro* stage, some respondents place the *gragwa* (*Vernonia amygdalina*)⁽²⁸⁾ leaves in the bag as well to improve the flavor (task number 9 in Table 1). They remove the leaves before frying the dough. Three out of six women whom the author obtained recipes from did this, and the rest said that they used to do it but do not now. Although no one clearly stated a reason why they had stopped, one said, "it is just a remnant of past practice." To be specific, the past practice was to use the dried and pounded leaves, buds or flowers of the *Vernonia amygdalina* together with *gesho* leaves as an ingredient.⁽²⁹⁾ This was considered to improve the flavor, but it is seldom done now⁽³⁰⁾ because *Vernonia amygdalina* is considered to make the *t'älla* stronger and make people drunk, there used to be more trees of *Vernonia amygdalina*, but they have vanished, and if you take it too much, you are at risk of heart disease.

Last, the aging period of mash should not be overlooked (task number 10 in Table 1). The author asked 17 people about mash aging times, and two points were common to all responses: mash that is less than two weeks old is immature [läga/yaləbäsälä], and the t'älla at that time does not taste good and is undrinkable. Instead, t'älla made from mash that has aged between one and six months is marmar [sweet] and suitable for drinking. Although the opinions about when precisely t'älla is most flavorful varied, 15 of 17 respondents gave a range from two to five months. (31) In the interviews, some described the benefits to the body of t'älla made from mash with optimal maturation. When it was described outside the optimal maturation, positive effects were not mentioned: t'älla made from immature mash was described as not beneficial for one's health and as leading to drunkenness, while that made from over-aged mash is impossible to drink.

People tend to like the t'älla with low alcohol content. The following is a conversation between a woman (TK, female, 40s) who intended to have a gathering at her home a month later and her mother-in-law (MT, female, 80s).

TK: This is t'älla for the coming event [mahbar]. Please taste it.

MT: Ara! This is very strong. It makes me drunk. I cannot drink this yet.

TK: I have added the däräk'ot but not the mäshraviya.

MT: This will be drinkable at mahbar time, but it is too strong now.

In the research area, people consider immature mash to be strong, and they tend to avoid t'älla made with this type of mash. (32) In social gatherings, local spirit [aräk'e] containing about 45 percent of alcohol is served as well. (33) They drink stronger spirit although they know it can easily make them drunk. (34) This suggests that the tendency to avoid unaged t'älla is not based on the alcohol content of drinks as a whole but in particular that of $t'\ddot{a}lla$. At a social gathering, everyone, male or female, usually drinks at least two or three glasses of t'älla, but do not expect to become drunk. (35)

As mentioned earlier, t'älla is drunk on various occasions. It is an alcoholic drink, but it is often drunk the same way that water is. They consider it to be water, especially when drinking with a meal during the day or in breaks from farm work. People working in the field drink t'älla to quench their thirst, and the word water [wəha] refers to t'älla at that time. If a person wants well water, it is necessary to specify clear water [t'ar waha]. Respondents explain that t'älla is tasty, easy to drink, and eases the fatigue [dəkamə yəkälakälal]. They usually drink off the 450 milliliter tin [t'asa] of t'älla while working.

Although everyone asked about the effects of t'älla mentioned its benefits, using expressions such as strengthen, ease fatigue, good for the body, good for the stomach, and for the stout body, all responded that it has no role in treatment of sickness.

It [t'älla] is good for the body. It is good for the stomach, but it does not cure sickness. (ZT, male, 50s)

We do not use t'älla when we are sick. When you are well, you drink it, and it makes you strong. (MM, female, 60s)

We do not use it for (treating) sickness. If you have a common cold, you should drink a glass of aräke [spirit], not t'älla. (AA, female, 50s)

The doctor (of the health center) told my son not to drink t'älla (when he was taking medication). He cannot drink it yet. He does not drink t'älla or eat well, so he is tired and cannot work. (GM, female, 50s)

This describes the role of t'älla not as treatment but as health maintenance and/ or promotion. As shown in the example of Mr. T, at the beginning of this section, t'älla is considered to be essential to maintaining good health, making it more than a supplement. They regularly drink it when they are in good shape without much consciousness of its health benefits. However, once they need to refrain from drinking it for some time, (36) they become aware of the disadvantages of not taking it.

CONCLUSION

This study demonstrated how food relates to health in the target area. A closer look at the perception of the relationship between a dish and its benefits, as illustrated in the example of *mät'at'ayb*, showed a perception that changed from food to medicine rather than food, depending on the time that the food was aged, even though both food and medicine remained *mät'at'ayb*; its role was expanded from maintaining health to treating sickness. On the other hand, *t'älla*, was not considered to have specific medical properties, but it was considered necessary to keep them healthy. Furthermore, while it is always referred to as *t'älla*, it was evaluated for whether it was effective, grounded in its ingredients, the work put into brewing it, and the aging time, all intertwined them with the differences in taste.

The functions of foods were not only related to the final products but also were considered on the basis of how they were prepared and their flavors, with considerations that go beyond the direct factors of health conditions, whether approached biomedically or nutritionally. When something is considered medicine [mädəhänit], there is always a clear aim, of treating a specific sickness, whereas when the same thing is food [məgəb], the benefit tends to come as the result of everyday habits. In that sense, food and medicine do not necessarily overlap as they do in cultures with a food therapy concept. However, as more biomedical studies on Ethiopian local foods are done and its benefits are more clearly defined, or when the contact with food outside the village increases among the villagers, and they come to be aware of the characteristics of their own foods, (37) the food therapy concept may develop in future. Learning the actual food habits, elaborate cooking techniques, and their perceptions can lead us to deep understanding of their health tips.

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NOTES

- (1) Words enclosed within square brackets present Amharic expressions that are equivalent to the English words that appear before them, and vice versa.
- (2) Note that the Amharic word *t'ena* is translated here as health, although it applies to a different range of meaning, in a typical heteroglossia between languages. For example, when *t'ena* is mentioned in relation to food, subtle elements such as taste and/or preparation can also referred to. Young (1976) translated *t'ena* as well-being in his discussion of medical beliefs among the Amhara. The author follows his view, but because this article restricts itself to the perception of the physiological aspects of *t'ena* rather than its spiritual side, she adopts the word health instead of well-being.
- (3) In this area, corn is normally called *mashäla*, which elsewhere usually means sorghum (*Sorghum bicolor*) in Amharic. In E village, sorghum is not grown.

- (4) Of 16 households surveyed, 0 in 2017, 2 in 2018 and 0 in 2019 were cultivating *teff*. The author asked them whether they had plans to grow it in the future, to which 15 of them responded no, and one who had grown it in 2018 reported being undecided. Including the 2 households that cultivated *teff* in 2018, 15 households grew finger millet and corn between 2017 and 2019, and 1 household only grew corn. The respondents reported growing barley [gäbas] (Hordeum vulgare), wheat [sənde] (Triticum spp.), peas, broad beans [bak'ela] (Vicia faba), chickpeas [shənbəra] (Cicer arietinum), niger seed [nug] (Guizotia abyssinica) and other crops, until about 8 years ago. Corn cultivation began during Derg era.
- (5) Sahlle (1990) cites teff as a raw material for t'älla.
- (6) These include the following: every Wednesday and Friday (except for the 55 days after Lent, Christmas, and Epiphany, if any of these are Wednesday or Friday), the Christmas fast [yä gäna ts'om] (from hədar 16 to tahsas 28), the fast the day before Epiphany [yä t'əmkät gad] (t'ər 10), the three-day fasting of Monday, Tuesday, and Wednesday 2 weeks before Lent [nänäwe], Lenten fast (from Monday between yäkatit 1 and mägabit 5 to the day before Easter), the fast of the 12 apostles (from the Monday around 50 days after Easter to hamle 5), and the fast of the Assumption [fələsäta] (from nähase 1 to nähase 15) (Ishihara, 2014: 67). Most lay people in the village fast until about noon on most fasting days and until 3:00 pm during fələsäta and yä t'əmkät gad.
- (7) Children up to 12th grade (about the third year of high school in Japan) often have breakfast before school on fast days.
- (8) This word means salt in standard Amharic. In E village, salt is usually called *ashābo*, and *ch'āw* means this seasoning. While *ch'āw* is similar to popular Ethiopian seasoning called *awaze*, women in E village distinguish the two by the specific spices and proportions of spices in each blend. They explain that *awaze* contains fewer types of spices than *ch'āw*, and the latter is more widely used than the former. As a substitute for *ch'āw*, a mixture of powdered spices called *bārbāre* can also be used, which makes the dishes hotter. Although little has been published on *ch'āw* or *awaze*, a microbiological study by Idris et al. (2001) is available.
- (9) Government-built wells appear every 1 or 2 kilometers in E village, and they are open anytime from early morning until sunset, with the exception of Saturday and Sunday. Each household must pay two *birr* each month for access to the wells.
- (10) However, *t'ālla* is not sold because, they explain, "the *t'ālla* we have is only enough for ourselves," "There's not enough to sell," and "We don't make it very often because it takes time to prepare it."
- (11) Women describe their food preparation using such terms as "ferment [yəfälal/yəbokal]." This implies that they are aware that these dishes are fermented. However, they do not necessarily regard them as examples of a concept of "fermented food."
- (12) The end of the name of *mät'at'ayb* shows its relation to cheese [*ayb*]. Then, the first part, *mät'at'a*, according to the people, refers to a mixture of many kinds of spices and herbs. However, this word is rarely used in conversation in this meaning, although it can be heard as an abbreviation for *mät'at'ayb*.
- (13) A dictionary reports that spice is called *k'əmäm* (Leslau, 1996c: 484) and herb is *əts'ə* (Leslau, 1996a: 368; 1996e: 154), but spices and herbs as a group of condiments are usually simply called *k'əmäm* (Leslau, 1996b: 469; 1996d: 70). The word *əts'ə* is often used to refer to something like a drug. Therefore, in this paper, the spices and herbs discussed are all referred to as *k'əmäm*. The morpheme *woch* indicates a plural.
- (14) Before this, the following work was performed: fresh milk was stored in a clay pot that had been washed with *Vernonia amygdalina* leaves and was smoked using the branches and leaves of *wäyra* (*Olea europaea* subsp. *africana*). The milk then begins to ferment

after two or three days. The fermented product is called *argo*. Women churn butter from the sour milk every two or three days. They rock the pot back and forth on the floor for hours. When the butter is removed, buttermilk [*arera*] remains inside the pot. It is slowly heated until a solid curd is formed, which is cottage cheese. The cottage cheese is removed from the liquid, covered with cloth, and hung on a beam inside the house to drain for one day. It is eventually ready for making *mät'at'ayb*.

- (15) The word *bärbäre* is usually translated into English as red pepper. However, here it refers to a mixture of ground red pepper and spices and herbs. After this is mixed again with water and is set to be fermented, it becomes *ch'āw*.
- (16) When the author asked men about the use of spices, some responded that she should ask their wives because they did not know. Purchasing and preparing spices is considered women's work, and men are usually not involved. A typical example of women's role in spices follows: when a woman was preparing her spice mix, her husband suddenly added a pinch of a different spice to the mixture without her permission. She is usually modest, but she retorted, glaring at him "Don't add that!" He mumbled something and was laughed at by his children.
- (17) The parts of each plant are used as follows. The seeds are taken from the Ethiopian cardamom, Ethiopian mustard, coriander, nutmeg, black caraway, and fenugreek. The fruits are used for the chili pepper, cumin, fennel, long pepper, and black pepper. The leaves are taken for the koseret, fringed rue, Abyssinian thyme, and ajwain. The bulbs are used for the Ethiopian basil, fringed rue, and clove. The buds are taken for the onion and garlic. The flowers are used for the Ethiopian basil and fringed rue. The roots are used for the turmeric and ginger. The bark is taken for the true cinnamon. These spices are generally purchased in Merawi, except for Ethiopian basil and the fringed rue, which grow wild locally.
- (18) A light-yellow stew-like side dish made without red pepper. Usually garlic, ginger and turmeric are added to it.
- (19) This refers to both a gaze that possesses evil power and the person who has it. It is often considered to be the cause of illness.
- (20) Though the alcohol content of *t'älla* varies depending on the degree of fermentation and the amount of water to dissolve, the former studies reported it from two to eight percent (Sahlle, 1990; Admassie & Amdework, 2010).
- (21) *Gesho* plays a similar role to hops in beer, as a preservative, bittering, and flavoring agent. Earlier studies (Sallhe, 1990; Ashenafi, 2006) describe both leaves and stems being used to make *t'ālla*, but in the author's research, only the leaves were used. However, the leaves, stems, and fruits are all used to make spirit. The respondents explained that the stems and fruits of the *gesho* damage the flavor of the *t'ālla*, but they do not affect *arāk'e*.
- (22) As described in previous studies, the containers used in the first step are washed with the leaves of *Vernonia amygdalina* and then are smoked with the branches and leaves of *wäyra* (*Olea europaea* subsp. *africana*); this was observed at the research site for this study as well (Sahlle, 1990; Ashenafi, 2006; Berza & Wolde, 2014).
- (23) In many parts of Ethiopia, *bərəz* refers to a non-alcoholic beverage made from honey. In the research area however, this word means the mixture of flours of germinated cereals, *gesho*, and water.
- (24) Filtration process can be added to separate liquid from the mixture before drinking, but they do not go it through at the research area. The lees are called *atäla* and are used as feed for livestock.
- (25) The narratives discussed here only describe barley and finger millet, but germinated corn is used as well. One village respondent described the grains used in step 1 as follows:

They always use corn malt in Merawi too. You cannot make good *t'älla* corn alone. Barley malt is always necessary. In the village, we add finger millet malt, which makes the *t'älla* good. (TK, female, in her 40s)

As TK describes it, the first step involves barley malt in both the village and in the town. Germinated corn is also usually used, but the village women do not stress this because they consider the barley malt to be the most basic ingredient for the step 1. The word bak'al usually refers to barley malt, and when another kind of germinated cereal is referred to, they tend to use this word with the name of the specific cereal, as in yä bok'olo bak'al [corn malt].

- (26) She usually only uses corn for *däräk'ot*. At the time of this conversation, she was preparing the mash for an upcoming event at home. She added the finger millet to improve the *t'älla*.
- (27) The expressions *märara* [bitter], *marmar* [mild/sweet], and *k'uməch'ər* [sour] are often used to evaluate *t'älla* flavors. The word *marmar* is conjectured to derive from *mar*, meaning honey, according to a villager:

Honey [mar] is nice and sweet [yt'omal]. marmar means delicious like honey. Sugar is sweet and good, but it is not marmar. We say marmar, for example, for good t'älla, for good spirit [arak'i]. Aged spirit is nicer and more marmar than newly distilled spirit. (BZ, male, 20s)

- (28) It is generally called *grawa* in Amharic; *gragwa* is the local dialectical variant.
- (29) There are studies that have reported that *Venonia amygadalina* is used as a substitute for hops in local African beer production (Lasekan et al., 1999; Lyumugabe et al., 2012).
- (30) The author asked 16 villagers whether they used *Vernonia amygdalina* as an ingredient at present, all except one answered no, and the one who answered yes said that she does not use it often.
- (31) There were no conclusive answers to the question of the storage life of mash, but most gave a response of around one year. However, in Bahir Dar, at an altitude of approximately 1,500 meters (500 meters lower than E village), the four people asked the same question answered not more than two to three months. The cool climate of the target area was considered to be suitable for long maturation periods.
- (32) The ethanol content of mash should increase during alcoholic fermentation. However, the perception among the respondents contradicts this.
- (33) According to Admassie & Amdework (2010), who studied *aräk'e* production and consumption in Oromia and Amhara, the alcohol content of *aräk'e* is less than 45 percent.
- (34) They fill a 50 milliliter shot glass called *mäläkiya* to the brim. Some abstain from drinking it altogether because of its high alcohol content, whereas almost all the people drink *t'älla* except for cases of a particular reason, such as following a doctor's advice.
- (35) They explain: you will get drunk if you drink *aräk'e*, but you will not if you drink *t'älla* [aräk'e sit'ät'a yəsäkəral t'älla gən ayasäkərəm].
- (36) This is mostly because they are on medications prescribed at the health center or hospital in the town.
- (37) Even today, the people in the village sometimes explain: "People have hypertension and diabetes in the town but not in the village" by linking the reasons of the problems to the difference of diets.

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