



A Survey on Ethnic Foods and Desserts of Mohr City in Fars

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Abstract

Ethnic foods, a distinctive part of a cultural group or nation, have recently attracted scientists' attention because of their potential health benefits. The city of Mohr in Fars province has an old record in history, dating back to periods of Achaemenids and Sasanids. To collect local data about ethnic foods and desserts of Mohr city, a questionnaire was designed and handed out to students of one high school. Thirty female students, familiar with the city culture and rituals, answered the questionnaire. The average age of respondents was 16.04 ± 0.84 years. The references were women in the families, mostly mothers. Thirteen desserts and fourteen types of food were extracted from questionnaires. Among local foods, *Sorou*, *Sholak*, *Reshtakou*, and *Gevzeh* were highly mentioned. *Halva Khorma*, *Ranginak*, *Jollab*, *Caster*, and *Dishou* had higher numbers among Mohr ethnic desserts. Using local products like date, fish, and wheat as food ingredients was more common. Recording old recipes and eating behaviors of ethnic groups are of great importance. For the next step, health benefits of these dishes are suggested to be deeply studied in further research.

Keywords: Ethnic food; Ethnic dessert; Mohr; Fars; Iran

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Introduction

Ethnic foods are one of the distinctive parts of a cultural group, race, religion, or nation. They may have health importance which makes them attractive to be researched on. Furthermore, giving them more publicity can introduce ethnic foods for broader groups worldwide [1]. Therefore, the interest for research on traditional and ethnic foods have recently increased, and they are being globally introduced in a scientific manner [2].

Numerous ethnic groups comprising *Fars*, *Kord*, *Tork*, *Torkman*, *Arab*, *Balooch*, *Gilak*, *Lor*, *Tabari*, *Armenians*, *Assyrians*, and *Georgians* live in Iran. So this country is rich in eating behaviors and staple foods

introduced by them [3]. Fars province of Iran has many ancient cities, one of which is Mohr (27° 33'19"N, 52° 53'01"E), the capital of Mohr county, whose background dates back to periods of the Achaemenids and the Sasanids (figure 1) [4,5]. It has a dry hot climate, and at the 2016 census, the total population of Mohr was about 7700. Its main products are wheat, barely, date, tobacco, citrus fruits, vine crops, vegetables, and animal-derived products [6]. The establishment of Persian Gas Refining Company near this city has caused many social, environmental, and economic changes in recent years [7]. This study was carried out to collect data about ethnic food and desserts of Mohr city in Fars province.



Figure 1. Location of Mohr city in Fars province, Iran

Methods

A questionnaire was designed to ask the details of local foods and desserts including local name, recipes, reference, serving

time, and any targeted group like children, teenagers, elderly, pregnant or post-partum women. The questionnaire was handed out in

one high school in Mohr city. Thirty female high school students who grew up in Mohr and were familiar with the city culture and rituals answered the questionnaire after being taught the importance of ethnic food as a part of one culture. They were free to consult with any experienced person in the family. Before analyzing obtained data, any food which seemed national or international such as pottage or spaghetti was excluded from the list.

Results

Among thirty students, 22 people had

mentioned their ages, whose average was 16.04 ± 0.84 years. The references of respondents were mothers (12), grandmothers (3), sisters (3), sisters-in-law (2), family members (5), aunt (1), and self-experience (10). Because of food varieties, some questionnaires had more than one reference. Thirteen desserts and fourteen types of food were extracted from questionnaires and they are summarized in table 1 with their recipes. Serving time and targeted people for each dessert or food are mentioned in table 2. A numerical chart (figure 2) shows the incidence of foods/ desserts out of thirty questionnaire sheets.

Table 1. Ethnic desserts and foods of Mohr based on respondents (Various recipes have been reported in some cases.) Scientific names of ingredients are reported in bottom of the table.

	Dessert	Recipes
1	<i>Ardeh</i> <i>Dishou</i>	date sap, tahini ☼ prepare date sap ► mix and homogenize with tahini
2	<i>Caster</i>	1.almond slice, coconut powder, custard powder, sugar, water 2.cocoa powder, custard powder, milk, oil, rose water, starch, sugar, spices (cardamom, saffron) ☼ add caramelized sugar to custard solution ► stir until thickened ► add spices ► garnish
3	<i>Chengal</i>	1.date, nigella, tahini ☼ powder and roast nigella ► add to seedless date ► mix with tahini 2.cinnamon, ginger, nigella, sugar, tahini ☼ add nigella to seedless date ► cook 30' ► add tahini and spices
4	<i>Dishou</i>	date sap ☼ add water to dried date ► cook for 1 hour ► put in a clean sack ► place in sunlight for 2-3 days until thickened
5	<i>Halva Ard</i> <i>Berenj</i>	coconut powder, ground rice, oil, rose water, pistachio, water, spices (cinnamon, ginger) ☼ fry ground rice ► add rose water and spices ► garnish with coconut and pistachio
6	<i>Halva</i> <i>Khorma</i>	1.date, flour, oil 2.date, flour, milk, oil, nut (almond), spice (cardamom) 3.date, flour, milk, oil, nuts (almond, walnut), spices (black cumin, cardamom, cinnamon, coriander, fennel, ginger, saffron) ☼ add milk to seedless dates ► mix with fried flour ► homogenize the mixture

7	<i>Halva</i> <i>Neshasteh</i>	oil, rose water, starch, sugar, nuts (almond, walnut), spices (cardamom, saffron) ☼ sauté starch in oil ➤ add sugar and rose water ➤ add spices ➤ garnish with nuts
8	<i>Jollab</i>	1. basil seed, ginger, ground rice, oil, sugar 2. basil seed, ground rice, oil, sugar, nuts (pistachio, walnut), spices (cardamom, cinnamon, ginger, pepper, thyme, turmeric) ☼ fry ground rice ➤ fry ginger ➤ add sugar, basil seed and spices ➤ garnish with nuts
9	<i>Legaimat</i>	baker's yeast, egg, flour, sugar, spices (black cumin, cinnamon, coriander, fennel, ginger) ☼ mix the ingredients and give them rest ➤ fry small pieces of dough in oil
10	<i>Ranginak</i>	coconut powder, date, flour, oil, sugar, pistachio, walnut, spice (cinnamon) ☼ cover seedless walnut-stuffed dates with fried flour ➤ garnish with sugar, cinnamon and pistachio
11	<i>Robb</i> <i>Dishou</i>	date sap, lemon juice ☼ boil lemon juice ➤ mix with date sap
12	<i>Sago</i>	coconut powder, rose water, sago (= palm starch), sugar, water, spices (cinnamon, saffron) ☼ wet sago and filtrate ➤ cook with sugar, rose water and spices ➤ garnish with coconut
13	<i>Vagardounak</i> <i>(Bale Tove)</i>	1. baker's yeast, date palm sap, egg, flour, oil, sesame, sugar, water, spices (black cumin, cinnamon, fennel, ginger, turmeric) 2. baker's yeast, chickpea, egg, flour, sesame, sugar, yoghurt, spices (fennel, ginger) ☼ mix flour with date palm sap, baker's yeast, and water ➤ put them in a warm place for 1 hour ➤ add mixture of egg, oil, sugar, and spices ➤ homogenize ➤ bake one spoonful like a bread ➤ pour sesame on both surfaces while baking
	Food	Recipes
1	<i>Gevzeh</i>	onion, turmeric, salt, water, wheat groats ☼ fry wheat groats ➤ add onion, turmeric, salt, and water ➤ stew with mild heat
2	<i>Ghalieh</i> <i>Sorou</i>	black lime, onion, pepper, sorou (processed sardine fish) ☼ add pepper and black lime to sorou ➤ cook with onion
3	<i>Katekh</i> <i>Alouk</i>	mountain almond, onion, salt, spice, water ☼ mash mountain almond ➤ add onion, salt, spice and water ➤ cook
4	<i>Khoshkou</i>	curd (dried whey), turmeric ☼ powder and sieve curd ➤ add turmeric ➤ put in sunlight
5	<i>Lalak</i> <i>(Gebneh)</i>	wheat groats, oil, salt, water ☼ fry wheat groats ➤ stew with mild heat
6	<i>Mashak</i>	onion, mung bean, thyme ☼ cook mung bean ➤ fry with onion ➤ add thyme
7	<i>Reshtakou</i>	baker's yeast, baking soda, flour, oil, onion, water ☼ mix flour with baker's yeast, baking soda and water ➤ cut the dough with manual pasta-maker machine ➤ fry strands ➤ add onion and salt ➤ stew with or without rice

8	<i>Salm</i>	goosefoot, yogurt, water ☼ cook goosefoot in water ➤ add yogurt
9	<i>Sholak</i> (<i>Halim</i>)	fried onion, meat (red or white), oil, salt, wheat, spice (cinnamon) ☼ cook wheat and meat separately ➤ mash them and mix ➤ garnish with fried onion and cinnamon
10	<i>Sorou</i> (a seasoning)	sardine fish, salt, pepper ☼ wash and clean sardine fish ➤ put a layer of fish in a jug ➤ add salt and pepper ➤ repeat this process until the jug is filled ➤ close the jug tightly ➤ put it in sunlight or burry it underground for 3-10 months
11	<i>Sorou</i> <i>Mahveh</i> (a fish souce)	oil, onion, sesame, sorou (processed sardine fish), tahini, water, spices (black cumin, coriander, fennel, galangal, mustard, nigella, rose petal, turmeric) ☼ fry sorou ➤ add spices ➤ put it on fresh bread
12	<i>Sourou</i> <i>Porgo</i>	purslane, sorou (processed sardine fish) ☼ add purslane to sorou
13	<i>Telit dou</i>	bread, yoghurt drink ☼ add small pieces of bread to yoghurt drink ➤ give them rest for 10 minutes
14	<i>Toolah</i> <i>Torsheh</i>	dock, mallow, salt, water ☼ cook vegetables in water ➤ add salt
<p><u>almond</u>: <i>Amygdalus communis</i> L. (kernel), <u>baker's yeast</u>: <i>Sacchaomyces cerevisiae</i> Meyen ex E.C.Hansen, <u>basil</u>: <i>Ocimum basilicum</i> L. (seed), <u>black lime</u>: <i>Citrus aurantiifolia</i> (Christm.) Swingle (fruit), <u>black cumin</u>: <i>Bunium persicum</i> (Boiss.) B.Fedtsch (fruit), <u>cardamom</u>: <i>Elettaria cardamomum</i> (L.) Maton (fruit), <u>chickpea</u>: <i>Cicer arietinum</i> L. (legume), <u>cinnamon</u>: <i>Cinnamomum verum</i> J.Presl (bark), <u>cocoa</u>: <i>Theobroma cacao</i> L. (roast seed), <u>coconut</u>: <i>Cocos nucifera</i> L. (fruit), <u>coriander</u>: <i>Coriandrum sativum</i> L. (seed), <u>custard powder</u>: an industrial mixture of starch, salt, natural color, and flavoring, <u>date sap</u>: <i>Phoenix dactylifera</i> L. (fruit syrup), <u>date</u>: <i>Phoenix dactylifera</i> L. (fruit), <u>dock</u>: <i>Rumex</i> sp. (leaf), <u>fennel</u>: <i>Foeniculum vulgare</i> Mill. (fruit), <u>galangal</u>: <i>Alpinia officinarum</i> Hance. <u>ginger</u>: <i>Zingiber officinale</i> Roscoe (rhizome), <u>goosefoot</u>: <i>Chenopodium</i> sp. (leaf), <u>lemon</u>: <i>Citrus aurantiifolia</i> (Christm.) Swingle (fruit), <u>mallow</u>: <i>Malva</i> sp. (leaf), <u>mountain almond</u>: <i>Amygdalus scoparia</i> Spach (kernel), <u>mung bean</u>: <i>Vigna radiata</i> (L.) R.Wilczek (legume), <u>nigella</u>: <i>Nigella sativa</i> L. (seed), <u>onion</u>: <i>Allium cepa</i> L. (bulb), <u>pepper</u>: <i>Piper nigrum</i> L. (fruit), <u>pistachio</u>: <i>Pistacia vera</i> L. (kernel), <u>purslane</u>: <i>Portulaca oleracea</i> L. (seed), <u>rice</u>: <i>Oryza sativa</i> L. (seed), <u>rose water / petal</u>: <i>Rosa damascena</i> Herrm. (flower), <u>saffron</u>: <i>Crocus sativus</i> L. (stigma), <u>sago</u>: <i>Metrolylon sagu</i> Rottb. (starch), <u>sardine fish</u>: <i>Sardinella</i> sp., <u>sesame</u>: <i>Sesamum indicum</i> L. (seed), <u>tahini</u>: <i>Sesamum indicum</i> L. (a condiment from toasted ground hulled sesame), <u>turmeric</u>: <i>Curcuma longa</i> L. (rhizome), <u>walnut</u>: <i>Juglans regia</i> L. (kernel), <u>wheat groats</u>: <i>Triticum aestivum</i> L. (seed)</p>		

Table 2. Serving time and target groups for mentioned ethnic dessert or food

	Food/ Dessert	Serving time	Used by
1	<i>Caster</i>	Ramadan	
2	<i>Chengal</i>		teenagers
3	<i>Dishou</i>	breakfast (winter)	
4	<i>Gevezeh</i>	Muharram	teenagers, elderly

5	<i>Gevzeh Sorou</i>		post-partum women
6	<i>Halva Ard Berenj</i>	breakfast	
7	<i>Halva Khorma</i>	Muharram, 13 th Farvardin, Yalda night, funerals	
8	<i>Jollab</i>		post-partum women
9	<i>Katekh</i>	Eid al-Adha	teenagers
10	<i>Katekh Alouk</i>		teenagers
11	<i>Khoshkou</i>		pregnant women
12	<i>Lalak</i>	weddings	
13	<i>Legaimat</i>	mid-Shaban	
14	<i>Mahveh</i>	breakfast (winter)	teenagers
15	<i>Mashak</i>		teenagers
16	<i>Ranginak</i>	Norouz, Yalda	teenagers
17	<i>Reshtakou</i>	Ramadan	teenagers, elderly
18	<i>Sago</i>	Ramadan, Muharram	children
19	<i>Sholak</i>	Ramadan, Muharram, Norouz	children, elderly
20	<i>Sorou</i>	Ramadan, lunch (summer)	teenagers, pregnant women, elderly
21	<i>Sorou Porgo</i>		post-partum women
22	<i>Telit dou</i>		pregnant women
23	<i>Toolah Torsheh</i>		teenagers
24	<i>Vagardounak</i>	Eid al-Fitr	

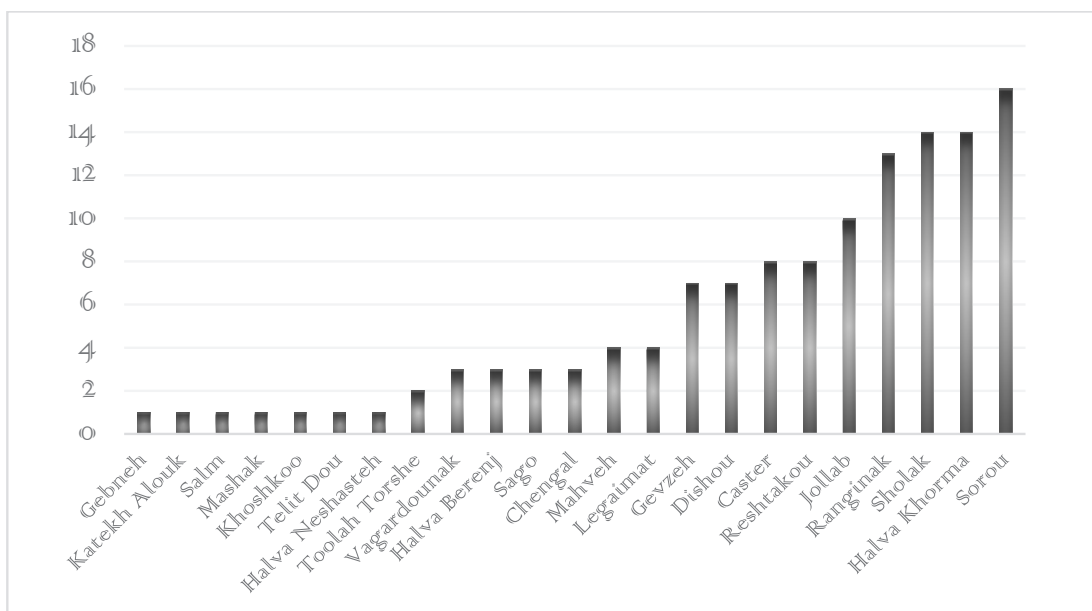


Figure 2. The frequency of each dessert or food out of 30 responded questionnaires

Discussion

Among local foods, *Sorou*, *Sholak*, *Reshtakou*, and *Gevzeh* were highly mentioned. Based on fig. 2, *Halva Khorma*, *Ranginak*, *Jollab*, *Caster*, and *Dishou* had higher numbers among Mohr ethnic desserts. Using local products like date, fish, and wheat as food ingredients was more common. Some seasonal foods such as *Katekh Alouk* and *Toolah Torsheh* were dependent on plant formation there. *Amygdalus scoparia* trees (*Alouk*) have widely distributed in Zagros forests of Iran [8]. Annual herbs of *Malva sylvestris* (*Toolah*) and *Rumex* sp. (*Torsheh*) grow in different parts of Fars province in springs [9]. *Halva Ard Berenj*, *Dishou*, and *Mahveh* are particularly served for breakfast in winter to improve stamina. *Caster*, *Sago*, *Sholak*, *Sorou*, and *Reshtakou* are among rituals of Ramadan, to provide needed energy through the fasting month. For teenagers, desserts like *Chengal* and *Ranginak*, and foods like *Gevzeh*, and *Sorou* were common to be prepared. *Jollab*, a dessert prepared mainly for post-partum women, contains spices, some of which like cinnamon and turmeric have been traditionally used as galactagogue medicinal herbs [10,11]. *Kashkou*, *Telit Dou*, and *Sorou* have been advised for pregnant women. Two former ones are rich in calcium. *Sorou* is the main ingredient of *Mahveh*, the fermented product from fish, which contains biogenic amines like histamine, putrescin, tyramine and tryptamine. Presence of *Micrococcus* and *Lactobacillus* species and microorganisms from Enterobacteriaceae

in *Mahveh* or *Mahyaveh* have been proved [12,13]. This fermented sauce named *Sahna* in *Qarabadin Salehi* is warm and dry in 2nd degree. It has been suggested as a stomachic for phlegmatic and wet stomachs, particularly after a high fat meal. *Sahna* may lead to pruritus, excessive thirst, headache, and producing black bile in body. Furthermore, its consumption in higher amounts is forbidden for warm-temperament people. Using ginger, vinegar, or sweets as modifiers with *Sahna* decrease its adverse effects [14]. Traditional recipe of *Halva Badam*, a fast-acting brain tonic, resembles to *Halva Khorma* of Mohr city. Moreover, the formulation of *Halva Neshasteh* is relatively similar to *Halva Faloozaj* and *Tar-Halva*, where starch was used as a thickening agent. These two traditional desserts have been suggested for sore throat, intestinal ulcers, and fever, but they are contraindicated for wet temperaments and those with symptoms of a wet-temperament stomach. Traditionally-called *Hariseh*, identical with *Sholak (Halim)*, is one of the most balanced-temperament foods, suitable for weak people [14]. As mentioned in table 2, it is cooked for children, elderly, and during fasting month in Mohr city, certainly to provide needed energy for consumers.

With respect to this study, usage of spices and salty fermented seasoning is very common in Mohr city. It should be considered that local people have gotten used to these foods through generations. Based on Tradi-

tional Persian Medicine, habitual eating behaviors and endemic food ingredients are two main factors for choosing more proper and favorable foods to denizens. Such foods are not necessarily suitable for different temperaments living in other places [15]. Recording old recipes and eating behaviors of ethnic groups are of great importance. Today, foods are being used both for their nutritional values and pleasure. Therefore, there is an intense interest to get familiarized with new cuisines. Health benefits of these dishes are suggested to be deeply studied in further research.

Conflicts of Interest

None.

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References

- [1] Dwyer J, Bermodez O.I. Encyclopedia of food sciences and nutrition. Academic Press, 2nd ed. 2003; pp 2190-2195.
- [2] Karizaki VM. Ethnic and traditional Iranian breads: different types, and historical, and cultural aspects. J Ethn Foods 2017;4:8-14.
- [3] Karizaki VM. Ethnic and traditional Iranian rice-based foods. J Ethn Foods 2016;3:124-134.
- [4] Atlas Gitashenasi Regions in Iran, Gitashenasi Publisher, Tehran 2014; p 147.
- [5] Chaverdi AA. Post-Achaemenid Legacy of the Persian Gulf Hinterland, Systematic survey of surface remains from Tomb-e Bot, Fars, Iran. Ancient civilizations from Scythia to Siberia 2017;23: 127-150.
- [6] Afshar Sistani I. An encyclopedia for Persian cities and provinces. Vol 2. Oghaf and Charity Organization, Tehran 2013.
- [7] Tavakol M, Nozari H. Analysis of social, economic, and environmental Persian gas refinery in rural areas (case study: rural areas of Mohr city of Fars province). Iran J Soc Stud 2012;1:29-48.
- [8] Salarian A, Mataji A.A, Iranmanesh Y. Investigation on site demand of almond (*Amygdalus scoparia* Spach.) in Zagros Forests (Case study: Karebas site of Chaharmahal and Bakhtiari Province). Iran J Forest Poplar Res 2009;16:528-542.
- [9] Haghghi M, Mozafariyan M. The introduction of extinct endemic vegetables of Iran. J Med Plants Res 2011;5:7085-7107.
- [10] Dog TL. The use of botanicals during pregnancy and lactation. Alternat therap 2009;15:54-58.
- [11] Sayed NZ, Deo R, Mukundan U. Herbal remedies used by Warlis of Dahanu to induce lactation in nursing mothers. Indian J Tradit Know 2007;6:602-605.
- [12] Zarei M, Najafzadeh H, Eskandari MH, Pashmforoush M, Enayati A, Gharibi D, Fazlara A. Chemical and microbial properties of mahyaveh, a traditional Iranian fish sauce. Food Control 2012; 23:511-514.
- [13] Ranjbar M, Mazloomi SM, Armin M, Hemmati F. Microbial and chemical properties of mahyaveh: A traditional Iranian fish sauce in Zarrin Dasht city, Iran. Int J Nutr Sci 2017;2:229-233.
- [14] Ghaeni Heravi SM. Qarabadin Salehi. Rewritten by Badr P, Mohagheghzadeh A, Shams Ardakani MR. Choogan Press. 1st ed. Tehran 2013.
- [15] Azam Khan M. Mohit Azam, Vol 1. Rewritten by Tafaghod R. Almai Press. 1st ed. Tehran 2015.