

## ORIGINAL ARTICLE

### The “Medicalization” of Food Supervision in the Qajar Period with an Emphasis on the Documents of Naser al-Din Shah’s Reign

#### Abstract

Food hygiene is a crucial aspect of public health, directly impacting societal well-being. From the mid-Qajar period onward, mirroring the broader “medicalization” of public health, traditional folk and religious understandings of food safety were gradually replaced by modern medical teachings. This research employs a descriptive-analytical approach, utilizing primary source documents to examine the components and challenges of food hygiene during the Naseri era alongside government interventions designed to improve it. Key focus areas included water, bread, meat, kitchens, cooks, eating practices, food storage, and fruits/dried fruits. The study analyzes health concerns in each area and the government’s corresponding actions, such as issuing advisory and directive decrees, establishing health institutions, and conducting public health awareness campaigns through print media like newspapers and magazines. The findings highlight the gradual infiltration of new scientific knowledge into traditional Qajar society, supplanting long-established folk practices while simultaneously presenting the inherent challenges accompanying this transition.

**Key words:** Medicalization, Qajar, Food hygiene, Naseri era, Public Health, Hygiene

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## Introduction

Nutritional health is a crucial aspect of public health, directly impacting human well-being. It encompasses maintaining hygiene throughout food production, storage, and distribution; failure to do so can spread various diseases (Noormohammadi, 2005, p. 149). The primary objective of nutritional health is to prevent food contamination, poisoning, and disease transmission (Khalasi, 2000, p. 148). “Medicalization” is a sociological concept describing the process through which aspects of human social and anthropological behavior, traditionally understood outside of medical science, become subject to medical authority. Consequently, medical frameworks and interventions define, manage, and control these aspects.

This article offers a new perspective on the evolution of public health, examining how food hygiene, previously defined by religious concepts such as permissible (halal) and forbidden (haram), purity, impurity, permissibility, and abominations, underwent a gradual shift from a religious framework to a medical one centered around the notions of health and disease. The mid-Qajar period and the fifty-year reign of Naser al-Din Shah were pivotal, marked by increased exposure to Western advancements, foreign governments protecting economic interests, and significant societal changes resulting in new institutions and attitudes towards social categories, including health and medicine.

While considerable research exists on Qajar-era public health, a dedicated study of food supervision through the lens of medicalization, specifically focusing on Naseri-era documents, remains absent. Existing research, particularly concerning “medicalization,” is limited. Willem Floor’s *Health of the People in Qajar Iran* (2016) addresses health and hygiene, including gastrointestinal illnesses stemming from poor food hygiene. Mehdi Alijani’s article, “Public health challenges in Qajar era Iran from the perspective of European tourists” (2013), analyzes Qajar-era health issues through the eyes of foreign travelers. Nader Parvin’s *Health, Treatment, and Development Process in the Qajar Period* (2018) explores factors influencing social, political, and health developments during the Qajar era. This study aims to bridge this gap in the literature by offering a more detailed and comprehensive analysis of the transformation of traditional beliefs surrounding food hygiene during the Naseri era, contributing to a deeper understanding of the medicalization process in the context of Qajar public health.

### The General state of Food Hygiene in the Qajar Period<sup>1</sup>

During the Qajar period, society was divided into two main groups: those living in cities and villages and nomadic popula-

1- In 1779, following the death of Moḥammad Karim Khan Zand, Agha Moḥammad Khan (reigned 1779–97), a leader of the Turkmen Qajar tribe, set out to reunify Iran. He was succeeded in 1834 by his grandson Moḥammad, who fell under the influence of Russia and made two unsuccessful attempts to capture Herat. When Moḥammad Shah died in 1848, the succession passed to his son Naṣer al-Din (reigned 1848–96). During his reign, Western science, technology, and educational methods were introduced into Iran, and the country’s modernization began. When Naṣer al-Din Shah was assassinated by a fanatic in 1896, the crown passed to his son Mozaffar al-Din Shah (reigned 1896–1907), a weak and incompetent ruler who was forced in 1906 to grant a constitution that called for some curtailment of monarchical power. His son Moḥammad Ali Shah (reigned 1907–09), with the aid of Russia, attempted to rescind the constitution and abolish parliamentary government. In so doing, he aroused such opposition that he was deposed in 1909, the throne being taken by his son. Aḥmad Shah (reigned 1909–25) succeeded to the throne at age 11 by the majlis in October 1925 and declared the rule of the Qajar dynasty to be terminated (<https://www.britannica.com/topic/Qajar-dynasty>)





tions. Therefore, to effectively examine the health of each group, it is essential to consider their unique circumstances. By modern standards, the health of settled communities during the Qajar era was poor. As understood today, individual and public health concepts were not well-established, contributing to the emergence and spread of various diseases. Basic health principles were not widely understood, and traditional beliefs about health and illness, often unsupported by evidence, were prevalent. Consequently, efforts to improve health conditions were largely unsuccessful (Floor, 2006, p. 50), and public ignorance and disregard for new health principles were commonplace. While some individual and collective health practices existed based on religious or cultural teachings (Ebrahimnejad, 2016, p. 64), the government's efforts to promote public health were minimal, as the state did not consider this its responsibility. However, from the mid-Qajar period onward, some intellectuals began to advocate for the government to take responsibility for public health. In criticizing the prevailing health situation, Taj al-Saltanah wrote: 'The primary duty of every government is to maintain the cleanliness of the streets and water supply and provide adequate resources for the people, particularly in Tehran, where destructive infectious diseases caused by lack of cleanliness are prevalent' (Taj al-Saltanah, 1982, p. 97). Thus, the long-term neglect of urban sanitation can be seen as one of the reasons for Iran's backwardness and underdevelopment compared to more advanced countries (Mahalati, 1980, p. 117).

In contrast, nomadic communities generally enjoyed better health than those in urban and rural areas. Their relatively open living spaces and self-sufficiency in food production reduced their susceptibility to diseases associated with urban food chains. Consequently, disease transmission among them was lower (Adamiyat, and Natiq, 1974, p. 336). From these observations, the poor state of food hygiene and the need to adopt new hygiene practices to prevent the spread of infectious diseases were more readily acknowledged in settled communities. This recognition led to the introduction of hygiene regulations, which were often integrated with religious teachings and health orders. While religious teachings strongly influenced individual behavior, new health regulations and government legislation related to drinking water, food types, and food production, preparation, and distribution gradually began to take shape. Over time, these modern health laws eventually replaced the traditional religious laws governing these areas.

## **Food Hygiene Problems**

### **1- Water Hygiene**

Providing hygienic, healthy, and satisfactory drinking water is recognized as a fundamental factor in maintaining human health (Helmsersht, and Delpisheh, 1995, p. 44). Access to safe and suitable drinking water was a critical health issue during the Qajar period. Water-related problems, including drinking water, sewage, and water for washing, along with the diseases they caused, were among the most significant health concerns in both urban and rural areas (Mohseni, 1997, p. 92). Consequently, water hygiene, particularly during the Nasrid era, was a serious problem. Using contaminated water for drinking, washing, and cleaning food or hands and faces contributed to the spread of contagious diseases (Gobineau, 1988, p. 91).

In most Iranian cities, drinking water was typically drawn from open or semi-covered streams that flowed through the streets (Serena, 1984, p. 63). Water from wells, springs, aqueducts, and rivers was frequently contaminated with insects and other pollutants (Floor,





2006, p. 82). Those who used this water for drinking, cooking, and washing clothes became carriers of infectious diseases. This contaminated water circulated throughout the city, leading to widespread transmission of illnesses like typhoid and malaria (Taj al-Saltanah, 1982, p. 97).

During the Nasrid era, European travelers noted that Iranians often considered all running water clean and safe for consumption, unconcerned about potential contamination. Claude emphasized this point, writing, "Iranians were neither afraid of dirt nor of diseases. The water they drank was deadly for Europeans" (Claude, 1984, pp. 32-33). Afzal al-Mulk described the water as red, yellow, and muddy, indicating its polluted and unhealthy state (Afzal al-Mulk, 1983, p. 157). Waterborne diseases were common, with recurring fevers, such as relapsing fever, being prevalent. These fevers, especially in northern Iran, were often attributed to the dirty water in cities, which was contaminated with worms and insects during the hot summer months (Ursell, 2005, p. 173; Tancoigne, 2013, p. 186). Additionally, poorly constructed water channels caused the water to mix with plant and animal matter, resulting in fever and bloody diarrhea (Polak, 1982, p. 58).

One traditional method of storing drinking water was constructing reservoirs, typically located in city centers, public gathering places, and caravanserais. However, well water, the primary source of drinking water at the time, was frequently contaminated with urban and rural sewage (Sarmadi, 1999, p. 31). Most cisterns were full of mud, insects, and harmful bacteria (Bagheri Kobourq, 1999, p. 285), and this water was used for a variety of purposes, including drinking, washing clothes and dishes, cooking, cleaning, and other essential tasks (Shahri, 1988, p. 421). As a result, parasites and worms thrived in this stagnant water (Jackson, 1973, p. 136). In addition to the unsanitary conditions caused by contaminated water sources, the lack of proper sanitation facilities in homes further contributed to the spread of numerous diseases (Mohseni, 1997, p. 102).

During the Qajar period, the preparation and handling of ice posed significant health risks due to the unsanitary practices employed by ice peddlers, who would transport and sell ice using donkeys (Shahri, 1988, p. 421). The ponds where ice was produced and stored were frequently contaminated, creating an environment conducive to the proliferation of diseases (Wishard, 2013, p. 104). Furthermore, refrigerators, which were meant to be used for cooling and water conservation, were often misused. As noted by Polak, people would dispose of their garbage in these refrigerators, leading to water pollution and contamination (Polak, 1982, p. 93).

The importance of clean drinking water has long been recognized. Ibn Sina, for example, considered well and aqueduct water undesirable compared to spring water, noting that it had been "imprisoned in the soil for a long time, mixed with soil, and had nutrients introduced into it." (Avicenna, 2014, p. 299) However, most health instructions related to water were based on religious rules, such as the properties of boiled, heated, sunny, mixed, or running water, rather than modern scientific understanding. Safe water, referred to as "blind water" in jurisprudential terms, had specific criteria. According to prominent jurists, this amount of water could fill a container with specific dimensions, totaling approximately 42 and seven-eighths units (Najafi, 2013, pp. 172-173).

Religious sources also contained various health recommendations regarding drinking water, such as reciting Bismillah (In the name of God) before drinking and thanking God afterward, drinking in three breaths, avoiding drinking water with the left hand, refraining from drinking water between meals, and abstaining from drinking water after ingesting





fatty or greasy foods (Majlisi, 1990, p. 37).

This emphasis on religious rules rather than scientific understanding and a lack of attention to the principles of water hygiene meant that Iranians often failed to distinguish between clean and polluted water. Europeans, in contrast, usually avoided drinking this unhealthy water (Wishard, 2013, p. 104) and were advised to avoid drinking Tehran water or at least boil it before consumption (Brugsch, 1995, p. 87). However, boiling water was often impractical for ordinary people, and access to resources was limited (Helmseresht, and Delpisheh, 1995, pp.10-23; Shahri, 1997, p. 107). Furthermore, a belief in fate and superstition was widespread, with many Iranians believing that “Man’s health is in the hands of God, not boiled water” (Wishard, 2013, pp. 219-220). The French traveler Arthur De Gobineau confirmed this attitude, noting that despite warnings about the need to boil water, people continued to drink untreated water, attributing illnesses to divine will (Gobineau, 1988, pp. 93-94). Consequently, failure to boil water was a significant factor in the spread of disease.

Additionally, the low level of knowledge among the general population and medical professionals, coupled with the entanglement of treatment methods with folk beliefs, posed a significant obstacle to health development during the Nasrid era. Lack of cooperation and resistance from the public further exacerbated these problems.”

## 2- Bread Hygiene

During the Qajar period, bread was the primary and most important staple food for the Iranians (Donohue, 2017, p. 81). The significance of wheat, barley, and other grains was so great that numerous Quranic verses, narrations, stories, and instructions emphasize their importance in religious texts. The significance of bread was so deeply ingrained that disrespecting it, even discarding small pieces, was considered a punishable offense (Majlisi, 1990, p. 50). Islamic teachings related to Hisba (religious enforcement) included recommendations for maintaining the hygiene of bread and the proper principles and practices. Ibn Akhwah, for example, advised bakers to “cover their mouths and wear white handkerchiefs around their necks.” This was intended to prevent saliva or nasal discharge from contaminating the dough when sneezing or talking and to prevent sweat from falling from the neck (Ibn Akhwah, 1968, p. 70).

However, the actual conditions surrounding bread production were far from hygienic. While various factors such as droughts, famines, insecurity, and mismanagement by rulers affected bread quality, social traditions within the underdeveloped Qajar society were a major contributor to its unsanitary nature. European tourists frequently noted that the bread was hard, bitter, and often inedible (Polak, 1982, p. 85). Bakeries themselves were in poor hygienic condition, and bakery workers often kneaded the flour with dirty, muddy water in full view of passers-by (Benjamin, 1984, p. 76). As a result, the bread that reached consumers was often a mixture of wheat, soil, and other undesirable substances. Bakers typically used dirty sacks to collect flour from warehouses (Mostofi, 1992, p. 410).

The poor quality of bread was particularly evident during the famines of 1277 AH, 1287 AH, and 1288 AH (corresponding to 1860-1871 CE) in the Qajar period, especially during the Nasrid era. Historical records specifically mention the low quality of bread during these times. (Manuscript No. 295/8089, 1905, pp. 18-95; Manuscript No. 999/44073, 1916, p. 1; Manuscript No. 295/259, 1909, p. 1)





### 3- Meat Hygiene

Iranian society during the Qajar period was deeply religious, with religious doctrines significantly shaping daily life and behaviors. Social or governmental rules did not regulate food hygiene but instead dictated by religious laws. These laws defined what was considered healthy and proper, with deviations seen as deserving of divine punishment. Religious guidelines included detailed instructions on health matters, particularly halal and haram meats.

According to these rulings, the meat of certain four-legged animals, such as sheep, cows, camels, and deer, was considered permissible (halal). Conversely, the meat of predatory animals with sharp teeth and claws, such as lions, leopards, foxes, hyenas, jackals, and cats, was forbidden (haram). Even the meat of halal animals was considered haram if they were not slaughtered according to Islamic guidelines. Among sea creatures, scaly fish and shrimp were considered halal. The meat of birds is also considered halal, except for birds that lack talons, have no back claw, or have talons, like eagles or vultures.

The consumption of meat was encouraged in various religious verses and traditions, exemplified by the sacrifice ritual during Eid al-Adha. Sheep meat, aquatic animals, and birds were particularly favored. Fresh meat was deemed the best, while eating raw or salt-dried meat was discouraged. A narration attributed to the Prophet Muhammad (PBUH) during the Battle of Khandaq stated, "The best food in this world and the hereafter is meat," emphasizing its perceived benefits, like strengthening the body, enhancing the ability to see and hear, and preventing physical deterioration. Abstaining from meat for prolonged periods was seen as detrimental, with a recommendation that if someone has not eaten meat for forty days, they should borrow money to obtain and consume it.

Islam also provides guidelines for the appropriate consumption of meat, advising against excessive intake and advocating for moderation. It is suggested that eating meat once every three days is suitable. (Najafi, 2013, pp. 172-173) However, practices in the Qajar period led to hygiene problems. Slaughterhouses were often located outside the city. After slaughtering sheep and cows, the carcasses were transported by horse and cart to butcher shops, which often led to contamination (Tajbakhsh, 200, p. 548). Slaughterhouses themselves were frequently unsanitary, with dirty walls. Moreover, meat was transported to cities using horses and mules, often spoiled due to heat, dust, and dirt (Gallimore, 1975, pp. 10-13). The tradition of animal sacrifice, often linked to celebrations and mourning rituals, further contributed to unsanitary conditions and the spread of disease because hygiene was often neglected. As Pollock noted, "Due to the abundance and decay of the meat, it was thrown into the streets. The meat, along with the sheep's garbage, hearts, and intestines, remained in the alleys for days, resulting in common occurrences of diarrhea and other diseases after Eid al-Adha" (Polak, 1982, p. 233). Fourier corroborated this, noting that "Two or three days after, the blood and guts of the sheep that are killed every day in every direction make the space so dirty and stinky that it is no longer possible to stay there" (Fourier, 1987, p. 117).

In summary, poor hygiene practices associated with animal slaughter and meat handling during the Qajar period led to the emergence and spread of infectious diseases, ultimately contributing to unsanitary living conditions in urban areas.

### 4- Kitchen Hygiene

The kitchen, a critical space for food preparation, is a primary site where poor hygiene





can lead to the transmission of diseases, microbes, and food spoilage. Historical accounts indicate that kitchen hygiene received little attention during the Qajar era. This might have stemmed from the limited religious regulations in this regard, with religious guidance primarily focusing on re-tinning copper utensils when they became tarnished. Since most kitchen utensils were made of copper, re-tinning was common, reducing the incidence of copper poisoning. (Polak, 1982, p. 96).

European travelers offered varying accounts of kitchen sanitation during this period. Rice described kitchens as dark, dirty, windowless spaces with dirt or brick floors and smoke-stained, blackened walls (Rice, 1987, p. 132). When describing cooking pots, Pollak noted that a hard crust would form inside, and since pots were routinely re-tinned after a short period of use, cleaning was considered unnecessary (Polak, 1982, p. 94). D'Allemagne also observed women "cooking food in small, black, and dirty pots." (D'Allemagne, 1956, p. 726). Kitchen utensils such as pots, heating oil containers, and copper spatulas were rarely washed, becoming uniformly blackened from prolonged use. (Dolatabadi, 1972, p. 32).

Moreover, dishwashing practices provide further evidence of the poor state of hygiene. People often washed their dishes in streams contaminated with mud and various pollutants, using cloths (or napkins) that were dirtier than mud, contributing to the spread of germs and diseases (Shahri, 1988, p. 242; Najmi, 1985, pp. 128-312). (Figure 1)



*Figure 1. View of the Bleaching Shop (Najmi, 1985, pp. 128-312)*

While some scattered religious instructions existed regarding kitchen cleanliness (Eslahi, 2015, p. 72), these did not translate to widespread hygienic practices. The role of the cook was central to kitchen hygiene. In Iranian culture, several qualities were valued in a skilled cook, including the ability to prepare visually appealing and delicious dishes, mastery of various cooking techniques, culinary creativity, a keen sense of smell and taste, and the efficient use of resources. In addition, cooks were expected to prevent spillage, minimize waste, and maintain cleanliness (Blokباشi, 2016, p. 177). Nader Mirza Qajar highlighted piety, cleanliness, and hygiene as essential for cooks (Qajar, 2007, p. 17). One of the cooks' important religious duties was to keep kitchen utensils clean. (Mostofi, 1992, p. 268). However, this duty was not always observed. Reports from Naser al-Din Shah's annual cooking ceremony detailed how cooks would put vegetables, meats, and eggplants into pots with dirty hands. Dr. Fourier also described apprentice cooks peeling, cleaning, and cutting fruits and vegetables with unwashed hands and clothes stained with sheep fat. (Fourier, 1987, p. 270; Ghaziha, 2012, p. 109) (Figure 2)

### **5- Eating hygiene**

Religious texts contain numerous health guidelines under the title of "eating etiquette."





While adherence to all these guidelines required significant long-term training, they were considered *mustahabbat* (recommended) practices in Islamic law, and believers were advised to follow their implementation. (Majlisi, 1990, pp. 97). In the book *Hilyat al-Muttaqin*, it is written that:

When a Muslim wants to eat and says ‘*Bismillah*’ and ‘*Alhamdulillah rab al-alameen*’ while eating, God forgives their sins before the food reaches their mouth.” (Majlisi, 1990, p. 125)

“When the table is spread, four thousand angels surround it. If the servant says, ‘In the name of Allah’ (Bismillah), the angels say: ‘May God bless you and your food.’ Then, they say to the Satan: ‘O sinner! You have no power over them.’ After eating, if they say ‘Praise be to God’ (Alhamdulillah), the angels say: ‘These are the ones who give thanks for the blessings that God has given them.’ If they did not say ‘In the name of Allah’ at first, the angel would say to the devil: ‘Come, you sinner! Eat of their food.’ If they removed the table and did not thank God, the angels would say: ‘They are a group that did not thank God for His blessings and forgot their Lord.’ When the table is spread, say, ‘In the name of Allah.’ When removing the tablecloth, say, ‘Praise be to God.’ Whoever mentions the name of God at the beginning and end of the meal, God will not question that food. When a Muslim wants to eat and says ‘*Bismillah*’ and ‘*Alhamdulillah rab al-alameen*’ while eating, God forgives their sins before the food reaches their mouth.” (Majlisi, 1990, p. 125)

Iranians traditionally ate with their hands (Brugsch, 1995, p. 136). Eating with the right hand was recommended in religious teachings (Faiz Kashani, 1973, pp. 124-125). Some foreign travelers noted this custom, observing that “...Iranians used the three fingers of their right hand to eat and did not use the left hand. It is said that the left hand was used for the purification of the excretory organs according to religious teachings.” (Drouville, 1991, p. 74).



Figure 2. Cooking of Vowing Stew (*Ash-e Nazri*) (Ghaziha, 2012, p. 109)

During the Qajar period, the upper class used an *Aftabeh lagan*, an ewer and basin set, for handwashing before and after meals in banquets. They generally maintained cleanliness before eating (Jones, 2007, p. 20), and “after eating, they washed their hands, rinsed their mouths, and cleaned their teeth” (Brown, 1992, p. 188), with some even “washing their hands with rose water” (Masaharu, 1994, p. 178). However, these practices were not necessarily driven by modern hygiene principles, and in some cases, basic hygiene was overlooked. For instance, “before lunch, they used to dry their hands with a handkerchief





that was often very dirty” (Drouville, 1991, pp. 89-91; Holmes, 2011, p. 38).

While dining tablecloths were often kept clean, some accounts note that they were “rarely clean and never spotless” (Macgregor, 1987, p. 270). James Morier described a banquet table where “the scraps of the previous meals were left in their place; it was moldy and had an unpleasant smell” (Morier, 2005, p. 116). After a meal, instead of washing and drying plates with a dedicated towel, people would wipe them with the edge of their Qaba (a type of robe) or a handkerchief from their pockets (Moser, 1974, p. 264).

### 6- Hygiene of Food stores

The condition of food preparation centers also lacked proper hygiene practices. Food shops were broadly categorized into two types: those selling raw food materials, such as wheat, beans, meat, and fruit, and those selling prepared foods, such as grilled meats, halva, and other cooked dishes (Nodehi, and Vakili, 2015, p. 57). Unfortunately, hygiene was frequently neglected in both kinds of establishments. Barbecue shops were notorious for being among the dirtiest and smelliest. Even after cleaning and sweeping, the lingering odor of leftover meat and the unclean skewers and trays were bothersome to people. In addition to the unsanitary environment, the shopkeepers and workers were often among the least hygienic individuals. They would clean kebab skewers using rags and pieces of cloth collected from dirt and trash bins (Shahri, 1988, pp. 482, 541, 544; D’Allemagne, 1956, p. 186) (Figure 3). Farnipazi shops (a kind of Porridge), which sold baked goods, were another example of establishments where hygiene was not a priority. In Farnipazi shops, trays that other customers had previously used were often reused without proper cleaning in between uses. (Mostofi, 1992, p. 166)



Figure 3. *Traveling Barbecue* (D’Allemagne, 1956, p. 186)

Improper storage techniques and the common practice of selling these items in open-air markets exposed them to insects, leading to unsanitary conditions for dried goods (Floor, 2006, p. 83; Najmi, 1985, p. 312) (Figure 5). A more cautious and hygienic approach to handling, drying, and storing fruits could have mitigated the health risks associated with consuming these food items during this period.

During the Qajar period, fruits and dried fruits were primarily consumed raw, and little attention was paid to their cleanliness and disinfection. This contributed to the spread of various diseases (Serena, 1984, p. 27). While food drying was a popular preservation method, hygiene was often overlooked during the process. People were advised to wash dried fruits thoroughly with water before consumption. Various fruits, such as plums, apricots, peaches, and figs, were typically dried on rooftops or in corners of courtyards. This method required frequent turning and repositioning of the fruit. A lack of hygiene was a significant





concern because children in the household often handled or ate them directly. Dust and flies were also prevalent among the drying fruit (Rice, 1987, p. 48; D'Allemagne, 1956, p. 99) (Figure 4). Improper storage techniques and the common practice of selling these items in open-air markets exposed them to insects, leading to unsanitary conditions for dried goods (Floor, 2006, p. 83; Najmi, 1985, p. 312) (Figure 5).



Figure 4. Grocery Store and Fruit Shop (D'Allemagne, 1956, p. 99)



Figure 5. Fruit Shop (Najmi, 1985, p. 312)

### Measures Taken by the Qajar Government in Monitoring Food Hygiene

During the reign of Naser al-Din Shah, the Qajar government started taking steps to improve food hygiene based on emerging scientific knowledge. The primary objective was to enhance the prevailing health conditions recognized as inadequate. However, despite these efforts, the progress was limited due to several factors. These included insufficient sanitary facilities and resistance from the public, who were often either ignorant of modern practices or believed that religious orders were adequate.

#### 1- Recommended and Practical Orders

The initial steps the Qajar government took to enhance food hygiene primarily involved issuing orders and recommendations for monitoring food safety alongside efforts to raise public awareness. The increased contact with Europeans during this period played a significant role in establishing a municipal institution to create a more suitable living environment for the people (Mahbubi Ardakani, 1975, p. 128).

The earliest governmental interventions in food hygiene can be traced back to the era of Amir Kabir. He initiated several measures to improve sanitation, including the construction of high walls around traditional Yakhchal (ice houses) to prevent their misuse as garbage dumps in summer and laundry areas in winter. In addition, through articles published in the *Vaqayeh* newspaper, Amir Kabir raised public awareness about diseases





caused by drinking contaminated water, the dangers of disposing of waste in running water, and the practice of washing clothes in water sources (Adamiyat, 1955, p. 194). In 1322, the Tehran Municipality emphasized the need for public laundries to maintain the cleanliness of drinking water in cisterns (Floor, 2006, p. 298). A Tehran Municipality resolution in 1322 underscored the necessity of building public laundries to prevent contamination of drinking water in cisterns (Ganj Bakhsh Zamani, 2010, pp. 31-62). Furthermore, during the tenure of Mirza Abbas Khan, an order called the "Hasna Arrangements" was created, which outlined responsibilities for the cleanliness of alleys, water channels, and accounting officers, resulting in the organization of municipal services (Mahbubi Ardakani, 1975, pp. 129-131).

The government mandated that animals be slaughtered only in designated slaughterhouses, aiming to observe urban hygiene. New health regulations were gradually introduced, requiring compliance from slaughterhouses and butcher shops. The Tehran slaughterhouse was initially planned to be moved outside the city to Farah Abad, south of Tehran. However, due to its unsuitability, the slaughterhouse was relocated to Niazabad, where existing facilities enabled the implementation of health standards (Floor, 2006, p. 51).

Regarding hygiene in bakeries, the government mandated that dough handlers and bakers bathe daily and wear clean attire (Ain al-Saltanah, 1995, Vol. 5, p. 3323). Furthermore, every night, bread samples from all bakeries must be submitted to the head of the branch head, with the shop owner's name attached. Health officials also regularly inspected food preparation and cooking facilities, issuing orders regarding the cleanliness of dishes and workspaces. Contracts were established to ensure adherence in cases where these directives were not followed (Mostofi, 1992, p. 240). Other traders, such as those selling fodder, chickens, and sheep, often operated in the city's squares, which were usually dirty. In response, the government took steps to renovate and clean these public spaces, promoting a cleaner environment (Etemad al-Saltanate, 1989, p. 63).

## 2- Establishment of Health Institutions

The establishment of the Dar al-Funun (Polytechnic University) and the subsequent creation of the Sanitation Council and various health institutions marked a turning point in the medicalization of Iranian society during the Qajar era. These health institutions, often established by foreign delegations or occasionally by the Iranian government, provided medical and health services. In particular situations, these institutions played a significant role in distributing food to the impoverished and spreading awareness about health and treatment among the general public (Elder, 1954, p. 43).

Lectures on health, which were initially presented by the French physician Toulousan in Tehran in 1876 (1292 AH) (Elgood, 1954, p. 571), evolved into regular weekly events at the Dar al-Funun starting in 1893 (1310 AH) (Rustayee, 2003, p. 146). These gatherings ultimately led to the establishment of the Iranian Health Council, with the primary objective of developing a comprehensive national public health policy (Ghaffari, 1989, pp. 102-103). Finally, the creation of the Health Protection Assembly (Majles-e Hifz-e Sehhat) paved the way for implementing initiatives designed to enhance the population's health and the nation's overall well-being (Hashemian, 2000, p. 100). The Health Protection Council also endeavored to supervise public health by deploying health officials, known as Hafez al-Sehhat (Guardians of Health), to various provinces (Yaghmaei, 1970, p. 423). During this period, the Dutch physician Schlemmer, a public health officer and member





of the Sanitation Assembly, played a crucial role (Hashemian, 2011, pp. 55-81). Under his supervision, doctors inspected various food items, particularly milk, bread, meat, and fish, and also conducted inspections of grocery stores to ensure food safety and hygiene standards were met (Gallimore, 1975, p. 83).

### 3- Media

During this period, the inclusion of health-related articles and notices in the press played a crucial role in raising public awareness about modern health practices. The authors of these articles sought to educate the populace about new medical advancements and the importance of adhering to health principles, particularly in food hygiene. This effort was a significant step towards the medicalization of health in Iranian society (Gobineau, 1988, p. 211). Alongside the establishment of new schools and the influx of modern ideas, the press fostered a conducive environment for reading and writing, laying the groundwork for intellectual and cultural exchange between educated individuals, intellectuals, and government officials. Many treatises and books promoting new methods were published in Tehran and other cities during the first two decades of Naser al-Din Shah's reign (Molana, 1979, p. 79; Talabi, Rajabnejhad, and Tajmiri, 2017, p. 247). Newspapers such as *Vaqayi-e Ettafaqiyeh* and later *Iran* were published with the express purpose of enhancing the public's knowledge and understanding of health issues (Adamiyat, 2012, p. 386; Esmailzadeh, and Moradi, 2021, p. 10). The articles addressed concerns such as poor nutrition, the importance of cleaning water pipes, and proper kitchen ventilation (Ghaffari, 1976, pp. 46-128).

This process of disseminating health information through the press continued after the Naseri era. Under the reign of Muzaffar al-Din Shah, the establishment of the *Anjuman-e Baladieh* newspaper formalized these initiatives. An organization called *Baladieh* (Municipality) was founded, located in the "Khayamkhaneh" or "Chador-khaneh" building in front of Sabzeh Maidan. For a considerable period, Manouchehr Mirza Emadal Doleh led the organization and oversaw accountability measures. This organization was responsible for projects such as organizing the construction of aqueducts and dams, establishing sanatoriums and hospitals, and preventing water pollution by prohibiting the dumping of waste into streams (Adamiyat, and Natiq, 1974, p. 54; Mahbubi Ardakani, 1975, p. 132).

The *Baladieh* issued its first important orders regarding food hygiene in response to protests over public health conditions, notably from telegrapher Mirza Mahmood Khan. He highlighted that one of the municipality's duties, as outlined in *Beladi Law*, was to protect public health and that the slaughter of animals within the city should be banned, as it contributed to air pollution and the spread of cholera and other contagious diseases. He specifically named individuals involved in these practices, including Gholamreza Nami (*Anjoman-e Baladieh Newspaper*, 1946, p. 2). As a result, the municipality prohibited animal slaughter within urban areas and sought to eliminate "filth" in cities (*National Sacred Association Newspaper*, 1906, p. 3). Although local associations initially achieved some positive outcomes at the city level, their efforts were insufficient. The municipality aimed to institutionalize public ethics and standards of civil behavior, but these regulations were often violated (*Habl al-Matin Newspaper*, 1930, p. 15; *Esteghlal Newspaper*, 1910, p. 4).

### Conclusion

The Qajar era in Iran saw a significant evolution in the realm of public health. The





expansion, development, and progress of health initiatives during the Nasrid era, particularly under the leadership of Amir Kabir, led to a gradual decline in the influence of popular beliefs rooted in religious doctrines and toward modern, scientific approaches to health. The government employed a comprehensive strategy to improve public health: implementing community health directives, preventing communicable diseases, supervising food hygiene, establishing institutions such as the *Majlis al-Hifz al-Saha* (Health Protection Assembly), and promoting health awareness through newspapers and magazines. Educational institutions, like Dar al-Funun, and the press played a vital role in advancing public health, moving society away from strict religious doctrines towards adopting scientific standards in food hygiene.

Before the establishment of these institutions, health practices, especially food hygiene, were primarily governed by religious teachings. However, establishing these educational institutions, introducing communication tools, and governmental actions gradually introduced new health principles. As a result, the authority of religious rulings in health and treatment diminished. Consequently, by the end of the Qajar period, we observed the increasing “medicalization” of food hygiene, which became a crucial indicator of development.

#### **Authors' Contribution**

Matin Sadat Eslahi, Masood Kasiri and Nozhat Ahmadi contributed to the design and data collection of the article. Masood Kasiri proofread the article and all authors read and approved the final version of the work.

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