

Assessment of gastronomic heritage quality in traditional restaurants¹

Avaliação da qualidade de patrimônio gastronômico em restaurantes tradicionais

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ABSTRACT

Objective

This article discusses the concern with the preservation of gastronomic identity in regional dishes and proposes a methodology to increase the appreciation for these dishes, associating sensory and symbolic quality with current legislation on hygiene and sanitation.

Methods

A qualitative research in the form of a multicase study was done in traditional Azorean restaurants in a Southern, Brazilian city. Data were collected during the preparation of the dishes, using forms based on the systems Nutritional and Sensory Quality Assessment in Meal Production and Hazard Analysis and Critical Control Points.

Results

The results showed that it is difficult to control the process when methodologies and legislation that concerns the degree of hygiene and sanitation are followed, which results in changes to the traditional recipes that could lead to significant heritage losses.

Conclusion

Thus, by administering the method called Assessment of Gastronomic Heritage Quality, an adequate control of hygiene and sanitation was achieved, preserving the symbolic and sensory character of the typical dish.

Indexing terms: Food services. Food quality. Food handling.

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RESUMO

Objetivo

O artigo aborda a preocupação com a preservação da identidade gastronômica das preparações regionais, propondo uma metodologia para fomentar a valorização dessas preparações, associando a qualidade sensorial e simbólica às exigências higiênico-sanitárias vigentes.

Métodos

Para tanto, realizou-se uma pesquisa qualitativa, um estudo multicaso em restaurantes tradicionais açorianos, em uma cidade do Sul do Brasil. Os dados foram coletados no acompanhamento do processo produtivo das preparações, utilizando-se formulários baseados nos Sistemas Avaliação da Qualidade Nutricional e Sensorial na Produção de Refeições e Análise de Perigos e Pontos Críticos de Controle.

Resultados

Os resultados apontaram dificuldades no controle do processo a partir de metodologias e legislações que busquem a qualidade higiênico-sanitária, ocorrendo modificações nas receitas tradicionais que podem acarretar perdas patrimoniais significativas.

Conclusão

Assim, com a aplicação do método desenvolvido, denominado Avaliação da Qualidade de Patrimônios Gastronômicos, possibilitou-se um controle higiênico-sanitário adequado, preservando o caráter simbólico e sensorial da preparação típica oferecida.

Termos de indexação: Serviços de alimentação. Qualidade dos alimentos. Manipulação de alimentos.

INTRODUCTION

Eating is one of the dimensions of human life connected to both basic survival and socially and symbolically constructed elements. According to Fischler¹, food-related behavior reveals the culture in which each individual is inserted. Garine^{2,3} reinforced the idea that, above all, eating has implications on symbolic appreciation. Food options and prohibitions distinguish different human groups, contributing to the construction of the cultural identity of a people.

On the other hand, Brillat-Savarin⁴, one of the pioneers of French gastronomy, in a publication dated to the XIX century, also suggested that eating was an identity marker. Ikeda⁵ and Germov & Willians⁶ emphasized that it is during a meal that social interactions and sociocultural representations of those with a common culture can occur.

Thus one could say that the conceptual abstraction of a culture is sealed in a dish, with symbolic aspects overlaying the choice of foods, which can express the status of an individual in the society. In this way, the human factor and the

customs that contribute to the transformation of a dish into a regional one are attributed to the preparation techniques, to the ingredients and to the ways in which it is served, thus conferring a special characteristic to regional food⁷.

Eating stands out as an important identity factor in a society and could therefore be considered an Immaterial Cultural Heritage. According to United Nations Educational, Scientific and Cultural Organization (UNESCO)⁸, this can be defined as a manifestation of the intangible portion of the cultural inheritance of a people, including traditions, folklore, language, festivals and other manifestations, citing gastronomy as part of this heritage.

Gastronomy can be defined as the fundamental knowledge of all that refers to man with respect to that which he eats, aiming to oversee the conservation of man by way of the best possible eating habits⁴. Thus Garcia⁹ reaffirms the connection between gastronomy and regional identity, the food representing a language related to regional culture by the customs of a people. This fact includes its preparation, since the kitchen is connected to the way of life of a population.

Apart from nutrition and identity roles, eating can be a vehicle of plenitude and sensory pleasure or, likewise, result in a series of disagreeable sensations. Thus food, source of energy and health, can be a potential cause of disease¹⁰.

According to the World Health Organization¹¹, the etiological agents of more than 60% of the foodborne diseases are bacteria, viruses, fungi and parasites. This occurs due to inappropriate handling practices, contaminated raw materials and lack of hygiene during preparation, in addition to a deficient operational structure and, principally, inadequate processing with respect to time and temperature. Thus the illnesses caused by contaminated foods constitute one of the most widely known sanitation problems.

In this context, a greater appreciation for the hygienic and sanitary domains stands out in food quality analysis¹²⁻¹⁶. In this sense, Proença^{12,17,18} discussed the notion that food quality can be perceived in multiple dimensions, amongst which are the nutritional, sensory, symbolic, hygienic and sanitary dimensions. Thus this author considers it indefensible that various methodologies searching for quality report only one of these dimensions, as if the fact that the food is clean and not contaminated could guarantee that all the other characteristics are satisfactory.

In addition, increasing interest in local gastronomic heritage can be observed. Poulain¹⁰ believes that super-appreciation for popular traditions and authentic products is in opposition to the anxiety associated with the development of industrialized food and the risks of diluting local identities. In this context, Hernandez & Gracia-Arnaiz¹⁹ point out that the standardization of food products and, in parallel, the occurrence of foodborne diseases, lead to regulations and policies concerning hygiene that result in guaranteed sensory and microbiological stability of a product.

The HACCP (Hazard Analysis and Critical Control Points) methodology has been widely employed for hygienic and sanitary quality control

and aims to identify the hazards associated with all food production, processing and distribution stages²⁰⁻²³. The Nutritional and Sensory Quality Assessment in Meal Production (AQNS) system^{24,25}, was developed to control nutritional and sensory quality.

Despite the changes in contemporary eating habits due to globalization and the increasing regulations concerning hygiene, authors studied by Woortmann²⁶ considered that traditional foods have not been abandoned, and that the changes appear to constitute more adaptations to modern times than radical changes. Thus, according to this author, taste seems to be one of the last elements to denationalize and lose its reference with the original culture, and culinary art acts as one of the references of the perceived identity.

In a way, cuisine symbolizes a culture. The typical restaurants and their dishes constitute an important differential, leading customers into a familiar environment to recover their origins, and presenting a bit of local history. Thus typical food is related to leisure, and for tourists, the typical restaurants are the best reference for food consumption in the region. They evaluate the flavor of regional cookery by visiting local restaurants, and identify differences by tasting regional dishes.

In traditional/typical restaurants, one expects that gastronomic trends associate with sanitary requirements, resulting, in a harmonious way, in meals that are appropriate from the sensory, hygienic and sanitary points of view. There is also concern about symbolic questions, that is, the significance of the food to the individual, involving the appreciation for and preservation of the gastronomic identity of the typical dish, which can be a challenge.

This study discusses the possibility of promoting appreciation for regional gastronomies when they are faced with the need of conforming to the norms and regulations regarding meal production. It thus aimed to associate the sensory and symbolic quality of the typical dishes with

current regulations regarding hygiene and sanitation, in order to develop a method that furthers the appreciation for these dishes.

METHODS

A descriptive qualitative research in the form of a multicase study was used to systemize the proposed Assessment of Gastronomic Heritage Quality (AQPG) methodology.

The research was done in traditional Azorean restaurants in the municipality of *Florianópolis*, *Santa Catarina*, Brazil, aiming to follow and assess the production of typical dishes. The research aimed to associate the quality of the dishes from the hygienic, sanitary, sensory and symbolic points of view with the requirements of the current legislation, developing a method to valorize regional dishes²⁷.

Figure 1 shows the scheme used in the different stages of the research, systemized to construct the AQPG method developed in this study.

The first step considered the identification of the typical dishes and their recipes, based on an exploration of regional history, including the processes of societal colonization, miscegenation and evolution. The typical dishes selected for this study were: manioc flour mixed with hot fish broth, manioc flour mixed with cold and then hot water, fried fish, baked fish, seafood stew and breaded fish fillets with shrimp sauce. The selection took into consideration the presence of ingredients characteristic of the region and past and present consumption, composing the local diet. Another criterion was related to preparation. For the method to define a wide range of criteria, the researchers chose dishes that are prepared in different manners (baking, frying and stewing). This criterion made it possible to follow and analyze different production processes, increasing the likelihood of identifying hazards and potential results.

Restaurant selection depended on certain criteria, such as the definition of a typical restaurant. According to the definition, these restaurants are characterized by serving local

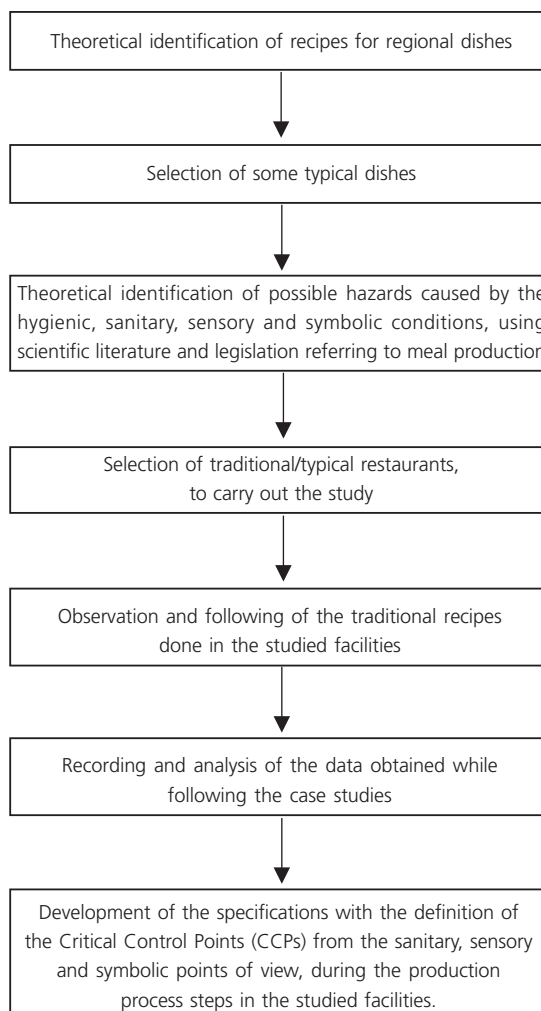


Figure 1. Scheme of the steps of the research used to construct the Assessment of Gastronomic Heritage Quality method.

dishes and by presenting a gastronomy characteristic of the region, including local, traditional ingredients. It should also, in some way, transmit the regional culture and history to the customers. Another criterion was the choice of traditional establishments in the region, recognized locally and presenting something of the history of local culinary art.

Observing and following traditional recipes

Before following the preparation of traditional recipes, one should first evaluate the

characteristics of the restaurant with respect to equipment, utensils, documents used to convey information, existence of traditional cookery books and menu quality. The foodservice was assessed according to aspects of the AQNS system^{24,25}. The analysis of these aspects was done using the Basic Routine for the Assessment of Foodservice Characteristics.

In order to assess the operational process for the typical dishes with respect to hygienic and sanitary characteristics, the study was based on criteria established by Brazilian legislation^{28,29} and recommendations found in the literature³⁰⁻³². With respect to sensory and symbolic characteristics, the method proposed the use of the handout produced by the "Associação de Crédito e Assistência Pesqueira de Santa Catarina" (Santa Catarina Association for Credit and Assistance to Fisheries)³³ and traditional regional cookery books.

The quality criteria chosen for this proposal were described for each step of the productive process, as from the hygienic, sanitary, sensory and symbolic characteristics on acquiring, receiving, storing and sanitizing the foods, the use of traditional techniques in the pre-preparation and preparation, standardization of the ingredients, seasoning and utensils, hygiene of the handlers and of the traditional utensils, arrangement techniques, decoration of the dishes and distribution, all the way to assessment and degustation of the dish.

Data collection techniques and instruments

Data collection was done by direct observation and observation using instruments. Direct observation was done using forms adapted from the model proposed in the AQNS^{24,25} and HACCP systems. These instruments helped follow the preparation of the typical dishes, considering the hygienic, sanitary, sensory and symbolic aspects. Thus, in practice, the proposed method includes the following stages:

- Administration of the Hygienic, Sanitary, Sensory & Symbolic Assessment Guide, which assesses various operational procedures in each stage of the productive process;
- Recording a detailed description of the preparation of the dish including all the ingredients, amounts and mode of preparation, including details of the necessary materials and utensils and data about the times and temperatures used, in addition to specifications about the desired sensory and symbolic characteristics and a photograph;
- Construction of a flow chart of the preparation of the dish including an illustration of the process, with emphasis on the Critical Control Points (CCP) related to the hygienic, sanitary, sensory and symbolic aspects;
- Development of a description of the process, emphasizing the stages, hazards, criteria, way of monitoring the process, corrective actions and registry of the final assessment, including evidence of whether the criteria are being followed.

It is worth mentioning that during observation, the employees could share their experiences, preparation techniques and recipes. The adoption of this strategy helped organize the observations, and some easy-to-miss details were taken down.

In the observation aided by instruments, the data were collected by following the operational process, measurements and recordings. Here, explanations regarding the preparation of the dishes and other information were recorded using a Philips digital tape recorder, model 7650-X. In addition to the tape recorder, photographs and videos were shot with a Sony camera/video; model Cybershot DSC S600, 6.0MP. The temperatures were measured with two thermometers: a Delt digital thermometer model DT-625 with a stainless steel probe and temperature range of -50°C to +150°C; and a probeless Minipa digital infrared thermometer model MT-350, temperature range of -50°C to +450°C.

RESULTS AND DISCUSSION

The case reports in this study were analyzed qualitatively, aiming to evaluate the operations and the CCP in relation to the preparation techniques, which constitute conditions that could lead to hazards with respect to the hygienic, sanitary, sensory and symbolic quality. The result expected from this methodology was a report containing the analytical results.

The proposal was based on the idea that monitoring the characteristics could be a strategy to improve the productive process, appreciating traditional aspects in typical restaurants.

Considering the information collected using the Hygienic, Sanitary, Sensory and Symbolic Quality Assessment Guide, and by following the production process of the typical dishes, a form was used to record the preparation of the dish and a flow diagram containing the classification of the hazards and of the CCP. The stages that could compromise the hygienic, sanitary, sensory and symbolic qualities of the dish were assessed in these documents.

In order to help understand the analyses, the preparation of the manioc flour mixed with hot fish broth was written down in detail as follows. The ingredients used for this dish were fine white manioc flour (1 cup) and fish broth (4 small scoops). The ingredients were all produced regionally. The fish was fished locally by local fishermen, and the manioc flour was produced in local mills. The dish was prepared by heating the broth in a pan until it started to boil and then adding the flour bit by bit by hand, mixing constantly in circular movements with an egg beater (formerly beaten with a fork or wooden spoon) until a dough with a smooth and soft consistency was obtained. The preparation time was about 2 minutes and the finished dish was portioned out into clay dishes. With respect to the desired sensory characteristics, this dish is expected to have a characteristic taste of fish (which is stronger if fish heads are boiled in the broth) and also taste of the traditional seasoning (especially the basil herb). The color

should be reddish due to the use of *colorau* (similar to paprika) and the consistency soft without the formation of clots, and the original flour should disappear completely. With respect to the desired symbolic characteristics, this dish represents a traditional dish consumed daily by the local inhabitants. It is a dish to accompany fish or beef and is considered an energetic food, indicated to provide energy to fishermen and their families to carry out their daily activities. Table 1 shows some of the conditions that could lead to hazards related to the hygienic, sanitary, sensory and symbolic qualities, as evidenced during the preparation of the manioc flour mixed with hot fish broth (local name "*Pirão de Caldo de Peixe*") and the manioc flour mixed with cold and then hot water (local name "*Pirão de 'Nailo'*").

In addition, a table was done showing the main CCP, Control Points (CPs) and control measures in each step of the operational process for the preparation of the typical dishes, as an auxiliary instrument to analyze the quality indicators defined in this study. Annex shows these data.

During this study, difficulties were observed in the control of the productive process of typical dishes using the methodologies and legislations regarding hygienic and sanitary quality. It should be pointed out that typical restaurants deserve differentiated treatment: their particularities should be interpreted so as to maintain the historic character, minimizing losses of heritage for the population. Thus it appears that a special interpretation of the legislation by the owners and inspectors is necessary. It is therefore suggested that studies be carried out together with the inspection departments, with the objective of developing training aimed at the adequate inspection of restaurants characterized as typical, so that adaptations or changes, when necessary, be administered in a way that minimizes interference with the characteristics of the dish.

The point should be raised that culture, like gastronomy, is dynamic, undergoing changes over the years, as do food habits and social and cultural values. Thus it must be pointed out that the

objective of a discussion such as the one here was not to maintain culture and gastronomy unaltered, but to make it possible to identify the culinary basis of a region. Evolution cannot forget the origins of a culture, since when one visits a typical restaurant, one expects to find dishes that identify the origin, the evolution, the transformations and the innovations that have occurred throughout the history of gastronomy, and the will to perpetuate local culinary memory should exist.

Administration of the assessment of gastronomic heritage quality method

The developed methodology contemplated two potential applications. The first application was the determination of the criteria for a set of typical dishes of different gastronomic heritages, for which the general recommendations will be described below. The second was its administration in typical Azorean restaurants, for which the criteria were already determined in this study.

The implementation of the AQPG methodology for other typical preparations first requires that all those involved in the process are

aware of the importance of this implementation and of its relevance to the improvement of the quality of the typical dishes. They should then proceed to evaluate the characteristics of the restaurant, determining the needs of the facility (equipment, utensils, existence of recipe books). It is recommended that the entire production process be followed, recording information that allows one to determine if the hygienic, sanitary, sensory and symbolic quality criteria have been met, making a detailed description of the preparation, including the sensory and symbolic characteristics.

The need for the team of workers to develop the necessary abilities to implant the monitoring and recording systems, such that this monitoring can be carried out during the different work shifts, should also be emphasized.

After following and taking down the production process, the preparation of a flow chart is recommended, marking the CCP related to the hygienic, sanitary, sensory and symbolic aspects. From this identification, a descriptive table can be developed, including the stages, hazards, criteria, mode of monitoring and the corrective actions, evidencing if the criteria are being met.

Table 1. Conditions that could lead to hazards related to the hygienic, sanitary, sensory and symbolic qualities of the “*pirão de caldo de peixe*” and “*pirão de 'nailo*”. Santa Catarina (Brazil), April/May 2006.

Assessment of gastronomic heritage quality		
Conditions that lead to hazards		
Typical dish preparation	Hygienic and sanitary quality	Sensory and symbolic quality
<i>Pirão de caldo de peixe</i> *	<ul style="list-style-type: none"> - Inadequate control of the hygienic and sanitary conditions of the wholesalers and the origin of the raw materials - Inadequate control on reception and storage 	<ul style="list-style-type: none"> - Choice of non-local or inappropriate suppliers - Inadequate control of the hygienic and sanitary conditions of the suppliers - Incorrect choice of flour (coarse) - Inappropriate storage of flour
<i>Pirão de 'nailo</i> **	<ul style="list-style-type: none"> - Inappropriate sanitization of the hands and incorrect use of gloves - Inappropriate sanitization of the utensils - Delay in distribution 	<ul style="list-style-type: none"> - Non-use of the traditional pre-preparation (broth or water temperature) and preparation (preparation mode and seasoning) techniques - Adaptation of non-traditional utensils for preparation and distribution - Delay in distribution

* *Pirão de caldo de peixe*: local name of the preparation of the manioc flour mixed with hot fish broth; ** *Pirão de 'nailo*: local name of the preparation of the manioc flour mixed with cold and then hot water.

CONCLUSION

The approach used in the present study concerning the concept of quality in the production of meals searched for evidence of the need for awareness regarding maintaining the identity of dishes by conforming to the legislation and preserving traditional recipes.

A suggestion to continue this study is to administer the AQPG method to typical dishes from other regions. This question is focused on visualizing the possibility that, as from the analysis of a set of consistent data about typical regional dishes, one could discuss the possibility of structuring specific legislation to cover this segment of meal production. Thus, the development of specific legislation for typical restaurants could facilitate inspection and guarantee that regional gastronomic heritages preserve their original characteristics of identity and taste, while offering satisfactory hygienic and sanitary characteristics to the customer.

COLABORATORS

P.L. UGGIONI participated in the drafting of the research project, collected and analyzed data, discussed the results and drafted the article. R.P.C. PROENÇA and L.A.Z.R. ZENI participated in the development of the research project, data analysis, discussion of results and drafting of the article.

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ANNEX

CRITICAL CONTROL POINTS/CONTROL POINTS, CONSEQUENCES FOR THE HYGIENIC, SANITARY, SENSORY AND SYMBOLIC QUALITIES AND CONTROL MEASURES IN THE MAIN STAGES OF THE PRODUCTION PROCESS OF TYPICAL AZOREAN DISHES AND THE RESPECTIVE CONTROL MEASURES. SANTA CATARINA (BRAZIL), APRIL/MAY 2006.

Process stage	CP/CCP*	Consequences for the HSQ, SEQ & SYQ**	Control measures
Acquisition & Reception	Raw material acquisition: Non-traditional/regional From insalubrious sources Reception without checking	Alterations in the sensory & symbolic aspects Multiplication of pathogens	Selection of traditional/local suppliers Visual evaluation and temperature control
Storage (refrigeration & freezing)	Long periods Absence of temperature monitoring Lack of raw material organization & identification Storage in inappropriate utensils	Multiplication of pathogens Alterations in the sensory & symbolic aspects Cross contamination Multiplication of pathogens	Time & temperature control Proper organization of the raw materials and identification with labels Storage in adequate utensils
(Dry)	Storage on shelves in bad condition Storage of utensils unprotected	Multiplication of pathogens Microbial/chemical/physical contamination	Storage on easy-to-clean shelves Storage in protected locations
Thawing	At room temperature without temperature control	Multiplication of pathogens Loss of fish juiciness Alterations in the sensory & symbolic aspects	Thawing in refrigerators with temperature control Thawing at room temperature with monitoring of the temperature
Pre-Preparation Food sanitization	Inappropriate sanitization	Microbial/chemical/physical contamination Cross contamination	Sanitization by immersion in a chlorine solution and rinsing with treated water
Standardization of cleaning, Cutting & Seasoning techniques	Lack of standardization in the fish cleaning and cutting techniques and in the types and amounts of seasoning	Alterations in the sensory & symbolic aspects	Standardization in the use of cleaning & cutting techniques and in the use of seasonings
Preparation (frying)	Lack of separation of the fryers Inadequate parameters with respect to oil/saturation/color changes	Alterations in the sensory & symbolic aspects Presence of polar compounds, flavor & appearance changes	Separation of the fryers Control of the oil temperature (never above 180°C) Visual evaluation of the oil characteristics: color, odor, viscosity, foam formation
Portioning, Decoration & Tray arrangement	Lack of standardization in the arrangement & decoration Choice of non-traditional items for decoration Inappropriate hand sanitization Inappropriate utensil sanitization	Changes in the sensory & symbolic aspects Loss of characterization of the dishes with compromise to the symbolic aspects Cross contamination	Standardization of decoration & arrangement Use of traditional ingredients Correct sanitization with soap & water & antiseptic rinse with 70% alcohol or the use of antiseptic soap Correct sanitization with water & detergent and disinfect with 200ppm chlorine or 70% alcohol
Delay & Distribution	Excessive delay and foods kept at warm temperatures	Microbial multiplication Drying out of the dishes, changes in the sensory & symbolic aspects	Distribute immediately after arranging Obey the temperature criteria: above 60°C (hot foods) & below 10°C (cold foods)
Tasting	Absence of assessment	Possibility of changes in the sensory & symbolic characteristics	Establish tasting as a stage in the process

* CP/CCP: control points/critical control points; ** HSQ, SEQ & SYQ: hygienic-sanitary, sensory and symbolic qualities.