

## HACCP BETWEEN THEORY AND PRACTICE: MAPPING THE COMPLIANCE OF PUBLIC CATERING ESTABLISHMENTS IN ROMANIA

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### **Abstract**

*The present paper examines the current stage of HACCP compliance in the public catering sector in Romania, based on data collected from 392 HoReCa establishments located in the country's main historical regions. The research employed a structured questionnaire developed in accordance with Regulation (EC) 852/2004. Responses from both employees and managers provided insights into organizational characteristics, staff training, equipment, procurement, storage, food preparation, service, sanitation, and event management. Descriptive statistical methods, including frequency distributions, were applied to analyze the data. Findings reveal that while most respondents are aware of HACCP guidelines, their application remains inconsistent across establishments. Differences in educational background, insufficient training, and unclear responsibilities hinder the effective implementation of food safety regulations. Technical barriers, such as inadequate equipment and substandard storage facilities, further undermine compliance. Hygiene standards are acknowledged but often practiced irregularly, suggesting that HACCP is followed formally rather than functionally. The conclusions emphasize the need for targeted interventions to improve infrastructure, strengthen training, clarify responsibilities, and promote a preventive, safety-oriented culture within the Romanian HoReCa sector.*

**Key words:** HACCP Compliance; public food infrastructure; HoReCa issues; regional food safety mappings, refrigeration capacity-compliance

### **INTRODUCTION**

Directive 93/43/EEC introduced the first horizontal hygiene requirements, granting Member States the freedom to adopt sectoral guidelines for implementation.

Dima, Radu, and Dobrin [2] evaluated the barriers to HACCP implementation and identified the cost of external auditing and lack of managerial support as determining factors. Initial costs still pose a serious obstacle for micro-enterprises: financial modelling conducted in a pasteurized milk plant indicates an increase of approximately 24% in investment when HACCP is implemented without prior preparation of GMP/SSOP programmes [13]. In the retail sector, over 60% of the annual HACCP maintenance budget is absorbed by the salaries of monitoring personnel [14]. But significantly higher HACCP scores and reduced technological deviations were observed in ISO 22000

certified companies than in non-certified companies [9].

The ISO 22000:2018 edition included organisational context analysis requirements and how to differentiate between strategic and operational risk [8], while the GFSI recognition of FSSC 22000 Version 6 in August 2024 provides added food chain scheme convergence [5]. The ISO 22000:2018 revision allowed for easy alignment with ISO 9001 and ISO 14001, a point highlighted in the official ISO document [8].

The direct technological effects are illustrated through a case study of the food supplement industry, where Enterobacteriaceae load was reduced below 1.0 log CFU/g after the implementation of ISO 22000 [4]. In public health, the efficiency of HACCP to suppress US chicken slaughterhouses from producing some estimated 190,000 cases of salmonellosis annually is estimated following a decline of 56% in contaminated carcasses [16]. The

digitalisation of prerequisite programmes (PRPs) and the integration of management standards have demonstrated operational, commercial, and regulatory benefits for organisations in the food chain.

In Romania, the first technical standards were concretised through Emergency Ordinance 97/2001 regarding the production, processing, and marketing of food, which was subsequently harmonised by Government Decision 924/2005. The ANSVSA 2023 National Integrated Control Plan document testifies to HACCP procedure verification as a central objective but registers regional differences in regard to infrastructure and technical skills of operators [1].

The National Sanitary Veterinary and Food Safety Authority applies the same evaluation criteria to any kind of food business operator, whether by scale or detail [15]. But, the rules for demarcating raw and processed product flow, providing changing facilities for staff, and setting up disinfection systems are applied in industrial buildings and cannot be easily applied in older rural structures. Paștiu and collaborators [11] highlight that over half of the sample of Romanian rural households included in their study consider the constant availability of perishable products to be a decisive factor in food insecurity. The lack of specialised storage facilities and unpaved secondary roads lengthen the route from the farm to the market and the possibilities for sales. Also, meeting quality standards depends on the punctual application of HACCP principles, which is a problem for many units in rural areas.

Agrotourism operators are facing the challenge of maintaining the traditional characteristics of local food products within the context of implementing food safety regulations. The small scale of agritourism operations leads to a different organisation compared to the large-scale food industry. The same people cultivate the raw materials, process them, and serve them to visitors, concentrating responsibilities at successive stages of the food chain. Industrial operators employ automated sensors for temperature, pH, and other critical parameter monitoring, while rural guesthouse operators apply eye inspection and experience

to determine food safety. This methodological difference creates spaces in process documentation and product traceability.

Existing literature in Europe on agritourism sustains that ongoing internal controls and disclosure to the public about hygiene practices lead to a more favourable consumer mindset toward food safety, although the effect size depends on the visitors' overall level of trust [7][10]. Qualitative interviews conducted in mountain guesthouses in Romania indicated that publishing the results of drinking water analyses and organising demonstration tours in the processing area increase guests' sense of transparency without imposing high costs on operators [12].

Examining the bibliographic sources confirms the gap between the requirements of international protocols and the practical possibilities of farms and guesthouses in rural Romania [3] [6]. The identified limitations (tight budgets, unskilled workforce, poor technical equipment, and distance from centers of expertise) constitute major obstacles to achieving compliance.

## MATERIALS AND METHODS

The research included an approach that combines quantitative and qualitative methods. The main data collection instrument is a structured questionnaire comprising 127 items organized into 9 distinct sections, each corresponding to a HACCP dimension. For each dimension, the questions were formulated to assess both the existence of formal procedures and the actual degree of their application in daily practice.

*-Section 1 - Staff Organization and Professional Training* (14 questions) aimed to identify the degree of formalization of responsibilities and investments in professional skills development.

*-Section 2 - Responsibility and Quality Control* (12 questions) aimed to determine the level of systematization of quality control.

*-Section 3 - Protective Equipment and Uniform* (15 questions) aimed to evaluate compliance with personal hygiene rules.

-*Section 4* - Procurement and Receipt of Raw Materials (16 questions) aimed to evaluate control over the supply chain.

-*Section 5* - Food Storage and Safety (18 questions) aimed to identify contamination prevention practices during the storage phase.

-*Section 6* - Preparation and Technological Flow (14 questions) aimed to evaluate control over the production process.

-*Section 7* - Service Areas and Facilities (12 questions) aimed to evaluate the conditions offered to customers.

-*Section 8* - Service and Coordination (13 questions) aimed to evaluate operational organization.

-*Section 9* - Complementary Facilities and Comfort (13 questions) aimed to identify investments in auxiliary facilities.

The questionnaire was published on the Survey Monkey platform and promoted on LinkedIn, requesting restaurant employees to complete it. Out of the 1,535 views, 392 resulted in the questionnaires being completed.

Among the 392 respondents, 15.6% indicated a secondary education level, 9.7% mentioned high school, 19.4% post-secondary education, 7.7% university education, and almost half, 47.7%, specified that they had specialised education. The gender distribution was approximately equal: 49.7% men, 50.3% women. Almost a quarter of respondents (20.4%) are located in Bucharest, and the next highest-ranking cities are Cluj-Napoca (14.8%), Timișoara (9.7%) and Iași (9.5%, N = 392). Brașov contributes 8.2% of the total, Constanța 7.1%, Sibiu 5.3%, Oradea and Craiova together amount to 5% and 4.1%, respectively, and Ploiești is represented at 4.1%. The rest of the respondents come from smaller or rural areas, such as Râmnicu Vâlcea, Buzău, Bacău or areas in Suceava, Vâlcea and Neamț counties, all of which amount to 12.1% of the responses.

The data obtained from the questionnaire were analysed using descriptive statistics, specifically frequency analysis, in order to highlight the distribution of responses for each item

## RESULTS AND DISCUSSIONS

### **The profile of the respondents as a public catering unit**

Regarding the types of services offered by the establishments analyzed, almost three quarters of them (72.7%) offer à la carte dining, 31.1% offer buffets, and 37.8% offer a fixed menu "table d'hôte". The prix fixe menu is available in 29.6% of the restaurants, the tasting menu appears in 13.8% of the cases, and the flexible menu is present in 22.7% of the establishments. Over half of the restaurants (54.1%) provide catering for events, 24.7% practice fast-food service, and 40.3% have takeaway services. Home delivery is found in 34.2% of the cases, room service in 10.7%, bar and cocktail services in 50.3%, and wine and specialty drink tastings are offered in 11.5% of the establishments. Personalized packages for groups and events appear in 25.0% of the situations, and other services were reported by 7.1% of those surveyed.

The total number of employees differs significantly between establishments, with an average of 18–22 people, and on average there are 4.3 waiters and 3.1 chefs who have specialized studies in the food industry. Pastry chefs, confectioners or sommeliers represent an average of 2.2 specialists per establishment. In the kitchen, the average is 3.1 chefs and 2.8 assistant chefs, and in the lounge, 4.2 waiters and 1.5 piccolos for the current activity. For events, the average increases to 5.3 waiters and 2.1 piccolos.

Regarding the restaurant's partitioning, compared to the serving room, 8.2% of the restaurants have less than 20 seats, 21.7% have 20–50 seats, and 35.5% fall within the range of 50–100 seats. The percentage of establishments with a capacity between 100 and 200 seats is 24.0%, and those with over 200 seats represent 10.7% of the total. Outdoor terraces have less than 20 seats in 13.8% of cases, between 20 and 50 seats in 25.0%, and over 50 seats in 12.0%, while 49.2% of respondents did not provide an answer in this regard. Regarding the VIP or lounge area, 10.5% have spaces under 10 seats, 19.9% have between 10 and 30 seats, 6.9% exceed 30 seats, and 62.8% did not report the existence of a VIP area.

The children's playground is small (less than 10 seats) in 4.6% of cases, medium (10–30 seats) in 6.4%, large (over 30 seats) in 3.1%, and 85.9% of the units do not have a playground.

The separate bar appears in 6.9% for a capacity of less than 10 seats, 21.2% for 10–30 seats, 9.2% for over 30 seats, and 62.8% did not provide answers in this regard. 39.0% of establishments have clearly demarcated and well-ventilated outdoor smoking areas, 20.9% have smoking areas but without effective separation from the non-smoking area, 24.7% have a total ban, and 15.3% have no clear rules. For the live music or DJ area, 13.8% have a dedicated space for the stage and sound equipment, 9.7% have a dance area, 8.2% have a separate DJ booth, 28.8% have ambient music without a dedicated area, and 39.5% did not verify the answers regarding the spaces for live music or DJ.

Regarding open kitchens, 20.2% of restaurants opted for open kitchens, and 79.8% responded that they do not have an open kitchen. The buffet serving area is present in 35.0% of the units, while 65.0% stated that they do not have such space.

Employee changing rooms exist in 89.0% of restaurants, separate ones for men and women in 44.9%, a common changing room in 26.0%, and 11.0% of establishments do not have a dedicated changing room.

Administrative offices are present in 50.5% of cases for management, space for accounting exists in 36.5%, and 21.9% of establishments do not have separate administrative spaces.

Regarding the sanitary facilities for customers, 55.6% have separate toilets for men, women, and people with disabilities, while 44.4% have a single common sanitary facility.

Private parking for less than 10 spaces is available in 32.1% of restaurants, 40.3% have 10–30 spaces and 27.6% have more than 30 spaces. Other spaces were mentioned by 9.7% of respondents.

The question related to ventilation and air conditioning systems shows that 36.2% of restaurants have air conditioning and efficient ventilation in all spaces, 32.7% have systems used occasionally, and 31.1% do not have a functional air conditioning system.

## **The existence of formal procedures and the actual degree of their application in daily practice**

### ***Staff organization***

Regarding staff organization, 50.5% of respondents confirmed the existence of a clear job description, 28.3% said that there is one but with overlapping roles, and 21.2% reported that responsibilities are divided informally. Written procedures for each position are followed exactly in 36.2% of cases; in 25.0% their existence is mentioned, but with sporadic application; and 38.8% indicated that there are no written procedures.

Regarding knowledge of hygiene and food safety rules, 41.3% responded that employees are trained upon hiring and through regular courses, 26.3% noted periodic training, 20.9% stated that training is partial, 7.4% said that only a few were trained and 4.1% reported that there is no clear training programme.

Regarding the person responsible for quality control, only 18.9% confirmed the presence of an exclusively designated person, 37.5% stated that the person responsible also has other responsibilities, and 43.6% indicated that there is no clear person responsible.

When asked about the distribution of responsibilities for quality control, 25.0% of respondents said that there is a person in charge for each shift, 34.2% mentioned that the manager deals exclusively with this aspect, and 40.8% answered that there is no clear system of responsibilities. Regarding staff rotation for maintaining quality, 28.3% confirmed the existence of a shift plan, 37.2% said that they try to maintain team stability without a clear plan, and 34.4% reported that rotation is not systematically organized.

The ways of communicating quality issues between employees and management are based in 21.2% of cases on regular reports and meetings, in 50.3% on informal communication, and in 28.6% there is no clear system. When asked if there is a system of bonuses or sanctions for maintaining quality standards, 24.0% confirmed the granting of incentives, 47.7% said there are only sanctions, and 28.3% answered that there is no reward or penalty system.

The employee performance evaluation system exists in 26.0% of restaurants with periodic evaluations and training sessions, 35.2% have evaluations without concrete measures, and 38.8% indicated that there is no formal evaluation method.

Correction of staff mistakes affecting service quality was handled through training sessions and regular feedback in 25.0% of cases, through warnings without additional training in 44.9%, and in 30.1% there is no clear correction system.

Medical tests of personnel are performed every 3 months in 21.4%, every 6 months in 30.1%, once a year in 40.6%, and only upon hiring in 6.6%, and 1.3% do not perform tests at all.

#### ***Protective equipment***

Regarding protective equipment in the kitchen, 67.3% of chefs wear a hat, cap, or hairnet; 72.0% have a white tunic or special uniform; 39.3% wear long pants; 58.9% wear a waterproof apron; 79.3% wear non-slip footwear; 45.4% wear disposable gloves; 24.5% wear heat-resistant gloves; 14.8% wear cut-resistant gloves; and 5.9% wear other types of equipment. Among waiters, 21.9% use disposable gloves, 13.3% protective masks, 44.6% protective aprons, 76.8% non-slip footwear, and 26.0% mentioned that there is no mandatory protective equipment. The waiters' uniform consists, in 54.1% of cases, of a white shirt, black pants or a black skirt, dark socks, and a vest; 18.6% wear a black t-shirt with the unit's emblem; 11.7% have a dark jacket with a white shirt and dark pants; 7.9% have a different uniform; and 7.7% do not have a mandatory uniform.

#### ***Procurement Organization***

Regarding procurement organization, 35.5% of respondents select suppliers based on contracts with authorized suppliers, 12.2% rely on the lowest price, 26.3% choose based on recommendations and business relationships, 16.6% make occasional purchases without clear contracts, and 9.4% do not have a clear selection system.

Supplier conformity documents are checked for each delivery in 23.7% of units, occasionally only for new products or when changing suppliers in 39.8%, only for the first collaboration in 26.5%, and 10.0% do not have

a clear verification protocol. The reception and acceptance of goods is carried out by specialized personnel according to a clear protocol in 41.6% of restaurants; in 37.5%, the reception is done by chefs or kitchen staff without formalization; 21.4% responded that suppliers leave the goods without strict verification; 28.6% record the reception in specific documents; and 25.0% do not have a clear procedure. The qualitative and quantitative reception of raw materials involves visual inspection in 59.4% of units, weighing products in 50.3%, measuring temperature upon reception in 41.6%, checking the expiration date in 70.7%, and taking samples for testing in 20.9%, while 27.8% do not perform detailed checks. Temperature checks of perishable products upon receipt are carried out in 36.2% of establishments, occasionally without clear documentation in 41.1%, and are not checked at all in 22.7%.

Product handling upon receipt to prevent cross-contamination is ensured by separate storage of raw products in 64.8% of cases, by storage on lower shelves in 54.3%, by airtight containers in 50.3%, by separating dairy products from meat and vegetables in 37.8%, by checking the temperature and expiry date of dairy products periodically in 30.9%, and by using different utensils for ready-to-eat foods than for raw meat in 44.4%, and 16.3% use the same utensils and surfaces for all foods. The raw material receiving log exists in 28.8% of units, only the main products are recorded in 43.1%, and 28.1% do not have a log. Managing non-conforming raw materials involves returning them to the supplier and documentation in 19.6% of restaurants, recording the issue without immediate action in 39.3%, and accepting them if they show no visible defects in 41.1%. The transport conditions of perishable products are checked by monitoring the temperature in transport vehicles in 51.3% of cases, controlling the cleanliness of the vehicles in 44.9%, and requesting appropriate transport documents in 36.2%; 27.0% do not have a clear protocol, and 22.4% accept the products without checking the transport.

#### ***Storage and food safety***

77.0% of respondents store raw materials separately by category, 64.0% follow the FIFO principle, 54.6% use properly labeled containers, 68.6% separate raw food from ready-to-eat food, 50.5% store vegetables and fruits separately from meat and fish, 40.1% store frozen products at appropriate temperatures, and 21.2% do not have a clear storage system.

Validity dates are checked daily by designated personnel in 41.1% of cases, weekly in 34.4%, occasionally in 17.3%, and 7.1% do not have a clear process. Storage labels contain the product name in 88.0% of units, the date of receipt/preparation in 80.1%, the expiration date in 70.4%, the optimal storage temperature in 56.4%, the supplier's name in 50.5%, the person who received/package the product in 41.3%, the product category in 36.2%, special instructions for use in 25.0%, and 6.9% do not use labels.

Temperature checks for refrigerators and cooking equipment are carried out daily with records in control sheets in 51.3% of establishments, weekly without clear documentation in 28.6%, only when there are technical difficulties in 13.5%, and 6.6% do not conduct regular checks.

The temperature for storing refrigerated products is between 0 and 4°C in 87.8% of restaurants, 6.4% place it between 4 and 10°C, 2.0% between 10 and 25°C, and 3.8% do not monitor it. 89.5% of frozen products are stored at -18 and 0°C, 5.1% are kept between 0 and 4°C, and 5.4% are not monitored. Fruits and vegetables are stored between 0 and 4°C in 64.0% of cases, 19.4% place them between 4 and 10°C, 7.6% between -18 and 0°C, 2.3% between 10 and 25°C, and 6.6% do not monitor.

Dry goods are stored between 10 and 25°C in 85.2% of restaurants, 4.6% between 4 and 10°C, and 10.2% do not monitor. Cooked preparations are stored at room temperature (10–25°C) in 46.7% of establishments, 31.9% between 4 and 10°C, 12.8% between 0 and 4°C, and 8.7% above 63°C.

Regarding the management of non-conforming or expired products, 51.3% label and isolate them separately, 45.2% document their disposal in control sheets, 32.1% return them

to the supplier when possible, 31.9% separate them without a clear disposal system, 11.0% keep the products until the stock is depleted regardless of the expiration date, 8.7% use expired products if they show no visible signs of deterioration, and 24.5% dispose of them without clear documentation.

#### ***Food preparation organization***

Regarding food preparation organization, 59.2% of restaurants have separate areas for meat, vegetables, dairy products, fish, and ready-to-eat foods; 26.3% have partially separate areas with overlapping stages; and 14.5% do not have a clear separation between food types. Food preparation takes place in dedicated areas for each type of dish in 44.4% of cases, 32.7% cook as needed without clear separation, and 23.0% handle raw and ready-to-eat products in the same areas.

Equipment used for food processing includes stoves, ovens, and fryers in 76.8% of restaurants; kitchen thermometers in 54.6%; temperature-monitored refrigerators and freezers in 71.2%; stainless steel tables and countertops in 60.2%; mixers, blenders, and food processors in 34.7%; sous-vide equipment in 12.5%; and ventilation systems and hoods in 41.6%, and 14.8% responded that they do not have dedicated equipment. Monitoring cooking temperatures for meat products is done through strict records for each batch in 36.5%, occasionally without a clear system in 40.1%, and without any monitoring at all in 23.5%.

In 41.3% of units, the technological flow of raw materials is logically organized to prevent raw products from intersecting with ready-to-eat ones; 30.1% have a clear circuit from reception to service; 20.2% have partially managed overlaps; and 8.4% do not have a clear flow.

Cleaning and disinfecting surfaces and utensils after each stage is done according to a strict protocol in 25.8% of restaurants; 37.5% have approved disinfectant solutions and dedicated clothes; 29.6% use color codes for utensils and cloths; 20.2% clean only at the end of the shift; and 12.5% do not have a clear protocol.

#### ***Service Area***

The service area is kept airy with appropriate distances between tables in 37.8% of

restaurants, 25.8% have a densely crowded space, 22.7% lack a clear circulation area, 14.3% have VIP or lounge areas, and 18.4% have facilities for people with disabilities, while 28.6% have outdoor seating areas.

The tables are positioned at an optimal distance for circulation (41.6%); 29.8% are close together to maximize seating; 50.3% have stable, clean chairs; 33.7% sanitize the chairs and tables after each customer; 22.7% arrange the tables modularly for events; and 17.6% do not have a clear organizational plan.

Access to service areas is managed through a clear reservation and flow management system in 36.2% of cases, while 40.6% seat customers on a first-come, first-served basis without any clear system; 31.1% adhere to evacuation routes and safety regulations, and 22.7% lack a clear organizational system. The lighting is adequate and creates a pleasant atmosphere in 46.2% of restaurants; 27.8% have areas with insufficient lighting, 15.8% consider the light too strong, 8.7% do not have a uniform lighting system, and 18.4% can turn the lights on and off in sections.

#### ***Ensuring hygiene***

Compliance with food hygiene and safety procedures is checked daily by 28.3% of establishments, weekly by 19.4%, occasionally from external sources by 21.4%, and 30.9% responded that there is no systematic examination.

In the field of quality management, 28.8% of units conduct daily staff hygiene checks by a designated person, 21.4% perform periodic checks through internal controls, 37.5% rely on self-monitoring, 9.7% only verify during external inspections, and 2.6% do not have a clear system in place. Staff hygiene is ensured by wearing gloves when necessary (19.4%), frequent handwashing (49.2%), avoiding direct contact with cutlery (28.6%), using the same gloves for multiple tasks (6.9%), and not following clear rules (12.0%). Hygiene materials are checked and replenished periodically in 37.0% of units, while 21.2% have a designated person responsible for checking them, and 32.9% do not have a clear protocol.

Restrooms are cleaned and sanitized regularly, with disinfectant materials available in 44.9 %

of cases; they are cleaned at regular intervals (1–2 hours) in 33.7%, several times a day without a set schedule in 15.1%, only at the beginning and end of the day in 4.3%, and when visibly dirty in 2.0%. In 53.3% of establishments, tables are cleaned and sanitized after each customer; 25.8% clean them at regular intervals regardless of use, 13.3% only clean them at the end of the day, 7.7% clean them when they get dirty, and 25.0% of waiters use dedicated cloths and solutions for each.

Cutlery and plates are disinfected and checked before each service in 57.1% of cases, 14.5% place them directly on tables without protection, 36.5% use special holders and boxes, 33.7% bring cutlery individually for each customer, 44.6% store glasses upside down on special racks, and 17.6% do not have a clear protocol.

#### ***Cleaning Organization***

Cleaning in the kitchen and preparation areas is scheduled daily in 41.3% of restaurants, with deep cleaning weekly in 33.4%, occasionally in 20.2%, and 5.1% do not have a clear plan. Cleaning products and disinfectants are stored separately, away from food, in 42.6% of establishments, in a dedicated cabinet within the same spaces as food in 41.6%, and 15.8% do not have a defined area.

Maintaining cooking equipment and refrigerators involves daily cleaning and disinfection in 33.4% of locations, daily refrigerator checks in 37.5%, periodic technical maintenance in 25.0%, the existence of a maintenance log in 19.4%, occasional cleaning in 27.3%, and 13.3% have no maintenance protocol. The coordination of the serving service is handled by the manager or head waiter in 50.3% of cases, a designated waiter in 29.6%, each waiter individually in 17.6%, and 2.6% report that no one is in charge until the event begins.

#### ***Serving services***

In the food service sector, 31.1% of servers receive regular training in serving techniques, 41.1% receive occasional training, 22.2% say training is only provided upon hiring, and 5.6% have no formal training. The working hours of the serving staff consist of fixed shifts in 37.2% of establishments, variable shifts in 33.7%,

frequent overtime without a fixed schedule in 22.7%, and spontaneous shifts in 6.4%.

Communication and food transfer between the kitchen and service occur in the following ways: digital in 25.0% of cases, verbal in 48.2%, with a designated person responsible for checking orders in 19.4%, the designated waiter picking up food directly from the kitchen in 51.8%, the busser assisting under supervision in 33.7%, the bartender handling drinks and food service in 22.2%, and 23.5% of establishments lacking a clear system.

Tasks during service are distributed as follows: 37.5% have a clear number of tables per waiter, 27.0% rotate between waiters to balance the workload, 50.3% divide order taking and serving between waiters and busboys, and 23.5% have no clear system.

Service staff breaks are scheduled in the following ways: 30.9% are planned to avoid affecting service, 37.0% are spontaneous, 21.2% are allowed only during quiet times, and 11.0% have no clear system.

In 18.6% of restaurants, handling and serving cutlery is done with gloves or special utensils; in 41.6%, waiters serve cutlery with bare hands; in 22.7%, cutlery is placed in an individual envelope or napkin; in 15.6%, it is placed directly on the table without protection; in 11.5%, customers take cutlery from a common holder; 18.6% use disposable cutlery, and 6.9% have no clear protocol.

Wine and alcoholic beverages are served at the optimal temperature in 37.5% of cases, the waiter presents the bottle before opening in 28.6%, the customer tastes before serving in 19.4%, and the drinks are served directly without presentation. In 14.5% of restaurants, plates for hot dishes are preheated in 28.3%, served at room temperature in 50.3%, and served cold without considering the dish's temperature in 21.4%. In situations where a customer returns a dish, 52.8% of restaurants discard it without reusing it, 34.2% replace it with a new one, 24.5% determine the reason for the return and document the issue, 5.4% reuse the dish, and 17.6% do not have a clear procedure.

#### ***Event Organization***

When it comes to organizing events, 37.2% of restaurants have a clear reservation system

with confirmed contracts and details, 32.4% plan events on an ad hoc basis, 24.7% allow customers to customize menus or decorations, and 5.6% do not have a clear reservation management system. In 28.6% of establishments, special event areas are available as private rooms with a defined capacity; in 31.6%, events occur in the main area without clear separation; 22.7% feature a terrace or garden dedicated to events and 17.1% lack a dedicated space.

Service at larger events involves one waiter for every 10–12 people in 48.0% of situations, 2 waiters for the same table with a menu in 24.7% of cases, 1-2 waiters and busboys per table in 26.3%, and 14.3% do not have a defined number of waiters. Staff coordination during events is the responsibility of the manager or head waiter in 34.7% of cases, a designated coordinator in 25.8%, or each waiter individually in 29.8%. 9.7% have no designated person in charge. The free space between tables during events is over 1.5 meters in 23.5% of establishments, between 1 and 1.5 meters in 30.1%, between 0.5 and 1 meter in 32.7%, and less than 0.5 meters in 13.8%. Linen for events is installed and cleaned by changing and sanitizing after each event in 32.1% of cases, checking before each event in 24.7%, changing only when visible stains are identified in 36.5%, outsourcing washing and ironing in 17.3%, in-house cleaning in 21.4%, and 12.5% do not have a clear protocol. Food scraps and waste are managed through strategically placed and regularly emptied trash bins in 54.1% of restaurants; 42.6% use separate containers for recycling, 25.0% collect waste according to a waste reduction plan, 36.5% train staff to clean frequently, 13.5% dispose of waste without a clear sorting system, and 9.7% have no clear protocol.

#### ***Collecting feedback on service quality***

Feedback on service quality is collected from sources such as customers in 40.1% of restaurants, employees in 36.2%, internal checks in 29.6%, external inspections in 25.0%, while 10.0% have no collection system. Problems reported through feedback are analyzed and quickly resolved in 21.2% of units, discussed occasionally in 44.6%,



corrected only in critical cases in 26.3%, and 7.9% do not have a clear remediation process.

#### **Menu management**

Planning and reviewing menus to ensure a quality offering is done periodically based on seasonality and preferences in 40.3%, through the intervention of nutritionists or specialized chefs in 25.8%, by using fresh products and carefully selecting suppliers in 51.8%, by taking into account allergies and special diets in 35.0%, and through internal tastings in 25.0%, while 7.7% do not periodically review menus and 5.6% do not have a clear verification process. Managing food allergies and special requests involves allergen information being present on the menu in 25.8% of restaurants, staff being trained to ask customers in 36.5%, separate preparation of dishes for customers with allergies in 19.4%, the existence of a clear protocol in 17.6%, the lack of a clear system in 25.0%, and recommending consumption at one's own risk without a guarantee of allergen elimination in 6.1%.

#### **Risk Management**

Regarding crisis management that can affect service quality, 20.9% of restaurants have a clear emergency and task redistribution plan; 30.1% train staff for unforeseen circumstances; 24.7% have alternative suppliers or solutions for procurement; 16.1% collaborate with temporary staff; 33.7% manage issues as they arise; and 8.9% do not have a specific plan for such situations.

In 31.4% of restaurants, unforeseen situations during events are managed through a technical backup plan; 25.8% have clear instructions for service delays, 35.2% mobilize additional resources in case of staff shortages, and 33.2% do not have a clear plan. Customer complaints during events are handled and resolved according to a clear protocol in 25.8% of situations, the manager discusses directly with the customer in 31.4%, waiters report to management in 35.0%, an internal report is completed in 20.2%, occasional complaint handling occurs in 19.1%, and 15.1% do not have a complaint management process.

## **CONCLUSIONS**

The findings of the study present us with the enduring gap between theoretical HACCP system requirements and actual practice in Romanian institutions of public catering. Though the majority of employees and managers are aware that HACCP regulations do exist, their implementation into daily practice is non-conformant and usually absent. Profile analysis of respondents indicated that while almost half of the staff possess some form of specialised training in the hospitality or food industry, the other half are founded on general education, which can reduce their potential to ensure food safety procedures all the time. This educational imbalance is illustrated in the variable quality of hygiene procedures and in the insufficient standardisation of routine operations.

The level of menu complexity and number of distribution formats enhance the risk and necessitate more stringent compliance procedures, founded on an examination of the foods available through catering establishments.

The study does, however, confirm that there remains little conformity of HACCP practices to these models of service and that many establishments are placing emphasis on formal compliance rather than upon preventing foodborne hazards. The same gap existed in the human resource organisation as well. Although all the majority units have individuals assigned specifically to food safety, they are not necessarily at distinct tasks, and the amount of continuous training is not sufficient enough to maintain continuous HACCP compliance.

As far as the technical aspect is concerned, equipment availability and storage and preparation facilities are still major areas of concern. There is a significant percentage of units that have faced difficulties in having proper temperature control, maintaining proper separation of raw and cooked products, and constantly monitoring critical control points. These deficiencies mean that the implementation of HACCP is often plagued by cost constraints, poor infrastructure, and lack of managerial commitment. The research also shows that long-standing strengths in hygiene and sanitation practices continue to exist.

Despite the predominance of facilities' declarations on the existence of cleaning procedures, their operational execution is non-standard and not formalised into control systems.

In general, the findings indicate that the implementation of HACCP in Romanian public catering is more motivated by legislative requirements than a proactive food safety culture. This may question the long-term appropriateness of compliance and the establishment's resistance to possible attacks on public health. Priorities such as expenditure on state-of-the-art equipment, reinforcing staff training, defining roles, and a prevention rather than reaction mentality are included. Therefore, all involved, including policymakers, inspectors, and catering managers, have much to benefit from the research's findings to make up for theory-practice gaps.

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