

Nutrition and Food Practices in Italian Older Population's Care Facilities: An In-Depth Analysis of Public Guidelines and Recommendations

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Abstract

Sociodemographic projections of population aging, healthy life expectancy, and household composition depict a future with an increasing number of older individuals living alone and in need of care. Older population's care facilities play a crucial role in promoting healthy aging, and within these facilities, nutritional and dietary practices complement care and prevention measures. The World Health Organization and the Italian National Institute of Health emphasize the importance of establishing long-term care standards and resources informed by scientific evidence to guide interventions. This study seeks to advance knowledge and improve practices by examining existing public guidelines and recommendations concerning food services in Italian older population's care homes. Documents were collected via Google's search engine using the keywords 'guidelines' or 'recommendations' in combination with 'collective catering for older people', 'hospital catering', 'healthcare catering', and 'social care catering'. Documents were analyzed via a thematic framework defined by the research team, which was designed to identify common recommendations, differences, and innovative elements in key strategic areas of intervention. 35 documents addressing various aspects of elderly dining, including optimal nutrition, suitable diets, best practices to enhance the quality and effectiveness of food provision and consumption, and the monitoring of guideline implementation, were analyzed. The analysis was performed via qualitative software (MAXQDA24). The study concludes that there is a

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proliferation of guidelines with little coordination between them. While the Mediterranean Diet is cited as the reference model, this appears more rhetorical than substantial. Furthermore, the lack of a robust monitoring system to oversee the implementation of these guidelines risks undermining their effectiveness.

Keywords: food, aging, older population, care homes, catering service, guidance.

1. Introduction

Population aging is a major and unprecedented global phenomenon. People worldwide are living longer, and every country in the world is experiencing growth in both the size and the proportion of older persons in the population (World Health Organization, 2022). Italy is leading global aging (United Nations, 2024). According to the latest report from the Italian National Institute of Statistics (ISTAT, 2023), individuals aged 65 years and older in Italy represent 24.1% of the total population; life expectancy is among the highest in the world, both at birth (82.6 years) and at the age of 65 (20.4 years), with the lowest levels of fertility (1.24 children per adult female). Demographic projections indicate a substantial rise in the oldest portion of the population: by 2041, the number of people over 80 is expected to increase by 35.2% compared with 2021, whereas the population of those over 90 is projected to grow by 69.4% (ISTAT, 2023). This phenomenon necessitates moving beyond the traditional notion of old age as a period marked by a mere decline in mental and physical functioning and characterized by socioeconomic dependency and marginalization (Cumming & Henry, 1961). Avoiding negativistic and fatalistic attitudes toward aging, such as age as being an obstacle to overcome (Lindland et al., 2015) necessitates embracing the paradigm of active, healthy aging (World Health Organization, 2002), which advocates for policies and strategies designed to protect the health, well-being, autonomy and social participation of elderly individuals.

1.1 The role of food service in older population's care homes and the need for guidance

Although life expectancy is increasing, healthy life expectancy remains significantly lower: in 2020, the number of healthy life years at birth in Italy was

68.7 for women and 67.2 for men (Eurostat, 2022). The proportion of Italian people living alone is projected to increase by 15% in 2043, with single-person households among the older population expected to represent 57.7% of the total single-person households (ISTAT, 2024). Consequently, a growing number of older individuals living alone with health conditions will need care and assistance, which is likely to result in longer or even permanent stays in care facilities for older people. In these settings, food services complement prevention and treatment measures for older adults through 'clinical nutrition' (Ministero della Salute, 2021, p. 5), which is regarded as an essential component of the services and interventions provided by the National Health Service (Ministero della Salute, 2016). Care institutions for older people are guided, regulated and often financially supported by public authorities, making communal dining a valuable policy tool for promoting social well-being, food security and public health targets. Nutrition interventions in care homes for older adults play a crucial role in enhancing quality of life by supporting physical, mental and social health. They address the physiological changes associated with food consumption that occur with aging (Calligaris et al., 2022), while helping to counteract the decline in food intake and the resulting nutritional deficiencies, which represent major risk factors for chronic diseases and age-related health deterioration (Kaur et al., 2019). Additionally, collective dining in institutional settings may play a crucial role in fostering the autonomy of older adults, as well as promoting their social inclusion, interactions and active participation. These factors have been shown to significantly influence not only the quality of their nutrition, but also their overall quality of life (Falk et al., 1996; Leroi, 2020; Wang et al., 2018).

Collective dining also influences the agri-food supply chain and the environment, for instance, by prioritizing foods from sustainable, organic and local sources while also generating food waste (Morgan, 2008; Morgan & Sonnino, 2008). Moreover, with a revenue of €1.1 billion and a workforce of 16,000 employees (ORICON, 2021), collective dining makes a substantial contribution to both the Italian economy and employment. The diversity among care and assistance facilities, however – varying in nomenclature, core services, regulations, technical and organizational systems, management approaches and operational constraints – raises challenges regarding the appropriate delivery of food services. Article 31 of the recent Italian law on policies for older people (Legislative Decree No. 29 of March 15, 2024) establishes nationally consistent and shared criteria for determining the quality standards required for the authorization and accreditation of both public and private residential facilities with healthcare and social care functions.

In signing a memorandum of understanding to improve care for older people, the World Health Organization and the Italian National Institute of

Health identified three areas of intervention: i) the development of long-term care standards to enhance the design and organization of the continuum of care for older persons, with a particular focus on those living with cognitive disease; ii) the exploration and summarization of available scientific literature on emerging issues related to healthy aging to prioritize and guide interventions; and iii) the development of materials to address sociocultural diversities in the care approach to older persons (World Health Organization, 2024). The scientific literature (Diez-Garcia et al., 2012; Donini et al., 2009; Wikby et al., 2009) also emphasizes the need for guidance for older people's care facilities so that their dietary handbooks are based on nutritional guidelines and recommended dietary practices.

1.2 Study aims

This article contributes by examining the existing Italian public guidelines and recommendations related to catering services in care homes for older people. The study aims to shed light on which set of public guidelines managers of collective catering services in older persons' care homes can rely on. It explores various aspects of older people dining, including optimal nutrition, suitable diets and best practices that impact the quality and effectiveness of food provision and consumption. Additionally, the study examines who is responsible for controlling the actual implementation of these guidelines and how this control is enforced, thereby determining the binding force of the guidelines. The study aims to contribute to knowledge and improved practices by addressing the following research questions:

- What do the guidelines reveal about optimal nourishment and food experiences of older residents living in care homes, including those with age-related diseases?
- What is an appropriate nutritious diet?
- What are the desired provision practices?
- What factors might lead to an improvement in care home food services?

1.3 Context of the study and relevance for an international audience

The study examined public guidelines concerning nutrition and food practice in care and assistance facilities for older adults — the so-called long-term care (LTC) sector. In Italy, this sector includes both public and private facilities. The latter may be managed by for-profit enterprises, religious organizations, or other nonprofit entities. Catering services are usually

outsourced to external companies, typically large players in the collective catering industry. The LTC sector is regulated by central government, while the Regions are responsible for organizing and delivering services — as defined by the State — through local health authorities. Three levels of government (central, regional and local) are therefore entitled to issue recommendations. The annual report of the observatory on LTC (Fosti et al., 2025) highlights strong regional disparities in service provision, with southern Italian regions lagging significantly behind those in the North and Center in meeting the residential care needs of older adults. Despite its specific characteristics, the Italian case is of interest to an international audience. A governance model structured across multiple institutional levels, granting autonomy to different territorial contexts, allows for the recognition of regional heterogeneity, including in dietary patterns. Official figures cited in paragraphs 1 and 1.1 show that Italy represents a particularly illustrative example of population aging — a global phenomenon. Italy is also considered the home of the Mediterranean Diet (Keys & Keys, 1975), a dietary model universally recognized for its beneficial influence on health and longevity (Dinu et al., 2018; Jennings, 2025; Sofi et al., 2013).

2. Methods

The identification of the guidelines was conducted online via Google's search engine. Documents were sought using the keywords 'guidelines' or 'recommendations' in combination with 'collective catering for older people', 'hospital catering', 'healthcare catering', and 'social care catering'. For document selection, the definition of guidelines as soft law, in contrast to traditional regulatory instruments such as laws and regulations (Senden, 2004), was referenced. Soft law encompasses principles, rules, or codes of conduct that, while not legally binding, can significantly influence behavior and decision-making within legal and political systems (Senden, 2004). According to Field and Lohr (1990), guidelines should be understood as recommendations for clinical behavior, developed through a multidisciplinary approach, and preferably developed through a systematic review of specific literature, with the purpose of assisting physicians and patients in making appropriate management decisions for specific clinical conditions. Defining guidelines as “scientific and technological knowledge that is codified, metabolized, and made available in a condensed form, so that it can serve as a useful guide to efficiently and appropriately orient decisions”, Chiarelli (2020, p. 621) emphasized their role in synthesizing scientific knowledge and guiding decision-making. She limits this definition, however, to policy acts issued by public system bodies that have been

granted the necessary authority and institutional legitimacy by law to issue unified directives, thereby standardizing the application orientations for all sector operators (e.g., Ministries, Regions, National Health Institutes). The selection followed a multiscale approach, starting with an overview of national documents and then analyzing those produced at the regional and local levels. Only documents specifically referring to older people's needs were selected. Among the guidelines analyzed, however, some encompass various sectors related to collective catering (i.e., schools, corporations, social healthcare, and social assistance). In these cases, based on the aims of this study, the analysis focused on aspects related to the nutrition of the older population. The documents collected were then analyzed using a framework defined by the research team and inspired by Bacchi's 'what's the problem represented to be?' (WPR) approach for public policy analysis (Bacchi, 2009). This approach is concerned with the «deep conceptual premises» on which policies are built (Bacchi, 2009, p. xix) and works by critically examining public policies through questioning the problem or issue they are intended to address. Following the WPR perspective, we began the analysis by identifying the solutions proposed within the guidelines and then «worked backwards» to understand the implied problem or issue (Bacchi, 2009, p. 48). We then examined the extent to which each of the solutions in the guidelines was translated into concrete actions in key strategic areas of intervention (Table 1). Finally, we examined common recommendations and differences among guidelines, what remained unexplored and the implications of the particular way the problem was represented. The analysis was performed via qualitative software (MAXQDA24).

Table 1. Areas of intervention and related aspects.

Nutrition	Diets, menus, foods, and their quality (e.g., menu cyclicity to promote food variety and seasonality)
Health	Service choices with reference to scientific evidence (e.g., Mediterranean Diet) for care and prevention of specific age-related diseases, such as dementia, malnutrition, diabetes, dysphagia, and cancer
Environment and Practices	Places, times, materials, and routines
Relationships and Other Social Aspects	Involvement of family members and caregivers, respect for cultural diversity (i.e., traditional and regional recipes), communication, education, and training interventions
Users' Engagement in the Service	Participation in menu definition, monitoring and evaluation
Sustainability	Environmentally-friendly strategies for sourcing and for managing surpluses
Implementation and Control of Guideline Application	Persons in charge and control measures

The documents examined refer exclusively to Italy, as the large number of guidelines in Italy (in total, 35 guidelines were collected; a detailed overview can

be found in Annex 1 of the Supplementary Material) require a thorough ad hoc analysis, especially considering the heterogeneity of food traditions and practices that characterize the regions of the country.

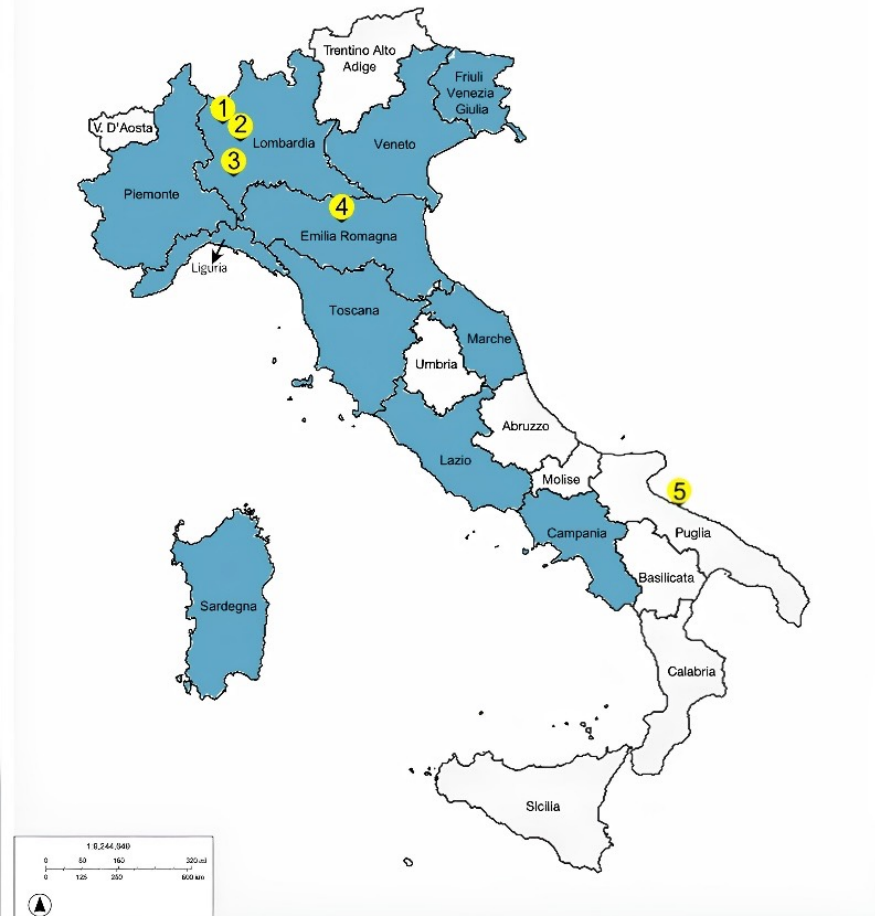
3. Results

The search for guidelines resulted in the collection of 13 national-level documents, 15 regional documents and five subregional documents drafted at local health authority level. Details on the geographic distribution of the Italian regional and local authorities that issued their own guidelines are provided in Figure 1. As evident from the figure, regional and local guidelines mainly cover the Center and North of the country, with nine out of 12 regions having defined their own guidelines, as well as four documents released at local level. On the contrary, the lack of guidelines is evident in the South of the country (including the islands), where only three out of eight regions implemented their own regional guidelines. The local health authority of Trani (Puglia region) is also the only one in this part of the country to have defined guidelines at a local level.

Additionally, two guidelines from supranational organizations, referenced by the national guidelines, were also analyzed. For a complete list of the documents reviewed, please refer to Annex 1 (Supplementary Material).

The national reference is the National Guidelines for Hospital, Care and School Catering issued in 2021 by the Italian Ministry of Health, which updates the previous National Guidelines for Hospital and Care Catering from 2011. According to these guidelines, the service targets are as follows: i) nutritional quality; ii) sensory quality; and iii) organizational efficiency. Nutritional quality is understood as the set of measures that make the diet a 'complement to prevention and care pathways' (Ministero della Salute, 2021, p. 5), whereas sensory quality refers to the ability of operators to prepare and present meals in an appealing way, promoting proper food intake and reducing food waste. With respect to service efficiency, which is aimed at achieving both nutritional and sensory quality, the guidelines allow for different organizational approaches depending on the facility's setup. The meal preparation and distribution process may vary depending on whether the facility has an internal kitchen or an external provider with meal delivery systems in place. The guidelines suggest that cook-serve or cook-hold-serve methods are preferred.

Figure 1. Map of the Italian regional and subregional entities that issued their own guidelines.



Source: prepared by authors using ArcGIS online.

Legend: In blue, the regions that have issued their own guidelines; in white, the regions that have not issued their own guidelines; the yellow dots indicate subregional authorities that have issued their own recommendations (1: Insubria, 2: Brianza, 3: Pavia, 4: Modena, 5: Trani).

3.1 Appropriate nutrition

The benchmarks are the Mediterranean Diet (MD) and the dietary reference intakes of nutrients and energy (Livelli di Assunzione di Riferimento di Nutrienti ed energia, LARN) for the Italian population, developed by the Italian Society of Human Nutrition (Società Italiana di Nutrizione Umana,

SINU), now in its fifth edition. This document includes specific guidelines for older patients with increased needs, particularly protein requirements, due to illness and hospitalization. The document is available for purchase on SINU's webpage, but the 2014 reference tables are freely accessible. The national guidelines suggest rotating menus on the basis of the average length of stay, distinguishing between acute care facilities (two-week rotation) and rehabilitation or long-term care facilities (four-week rotation). Menus should be seasonal, prioritizing fresh, local and organic ingredients. There should be a variety of fruits and vegetables, with at least four different types per week. Healthy cooking practices are recommended, such as avoiding flavor enhancers, reducing salt (which should be iodized), and using herbs and spices to add flavor.

3.2 Health concerns

The service should provide a standard diet as well as specialized diets tailored to specific nutritional needs and medical conditions (e.g., low-calorie, high-calorie, low-protein, gluten-free and reduced fiber for patients with dysphagia). This requires a balance between standard diets with consistent nutritional composition and personalized adjustments on the basis of the patient's needs in coordination with medical and dietary-nutritional staff. If the prescribed diet is insufficient, strategies such as meal fragmentation, texture modification and high-calorie or high-protein diets may be used to optimize intake. The primary goal of the guidelines is to combat malnutrition, the main issue for hospitalized older patients. The guidelines introduce early nutritional risk assessment (nutritional screening) at admission to initiate a nutritional plan if necessary to treat or prevent malnutrition. Nutritional risk screening should be conducted for all patients hospitalized for more than five days. It must be performed by ward healthcare staff within 48 hours of admission and repeated every seven days, even for those initially not at risk of malnutrition. If, despite optimizing the food on offer, the patient is still unable to consume enough nutrients, oral supplements may be administered. In severe clinical cases, artificial nutrition via the enteral or parenteral route is indicated.

A crucial tool for managing nutritional treatment during hospitalization is the nutritional chart, which is overseen by the dietician in collaboration with the physician in charge. It tracks nutritional indices and food intake, complements the clinical chart and is used by all ward staff (i.e., doctors and nurses) for comprehensive patient care. In social care facilities, a food diary fulfills the role of the nutritional chart. Specific guidelines were issued by the Ministry of Health (Ministero della Salute, 2017 in Annex 1) to address

malnutrition and support the recovery of the nutritional status of oncology patients.

3.3 Eating environment and practices

The guidelines emphasize the importance of suitable dining environments, schedules, and the organizational and social context in which meals are consumed. They recommend offering three main meals plus one or two snacks to meet nutritional needs, with the menu available to view in advance and the option to choose between at least two dishes per course in addition to fixed dishes. A single-dish meal (with side, bread, and fruit) is encouraged to streamline kitchen operations and ensure nutritional adequacy, but should be clearly communicated to users.

In hospitals, an individualized, simplified, and flexible meal-ordering system is advised to ensure the alignment between meals ordered and served, allow last-minute changes, and reduce food waste.

Meal distribution times should be similar to those typically followed at home, rather than being based solely on staff convenience. The sensory qualities of the meal—colors, shape, texture, and composition—impact consumption and should be considered when preparing recipes. Divided plates can help separate different foods, highlighting their colors and textures. Tableware, meal preparation, and schedules should promote independent eating. If this is not possible, meal assistance should involve staff, volunteers, family, and trained caregivers. For patients with cognitive decline, finger foods can foster nutrition, enjoyment, and autonomy. It is also important to divide daily food intake into six smaller portions and include regional and local recipes to help patients recall familiar tastes.

3.4 Relationships and social aspects

The guidelines emphasize the importance of designing diets that cater to the specific ethical, cultural, and religious needs of users. They also highlight the need to consider local traditions, especially those related to holidays or celebrations involving special foods.

The 2011 national guidelines referred to the involvement of professionals, family members, and volunteers in assisting those who cannot feed themselves, outlining their roles and responsibilities.

Additionally, there is a strong focus on training for staff, covering the following key topics related to nutritional care and patient assistance:

- Promotion of health and nutrition education, especially regarding the MD.
- The use of communication and relational strategies that can help users adopt healthy eating habits.
- Procedures for defining daily nutritional requirements or individual meals.
- Proper portioning of food.
- Safe preparation and consumption of special diets.
- Assessment of the quality of the service and the environment where meals are consumed.
- Evaluation of food consumption, implementation of measures to reduce food waste, adoption of environmentally-friendly sanitation products, effective waste management, and efficient use of water and energy.

The 2011 guidelines, which emphasized “the centrality of the hospitalized patient as a core principle” (Ministero della Salute, 2011, p. 4 in Annex 1), included, among their training objectives, the goal of raising awareness about “the passive and emotionally vulnerable condition of the hospitalized patient” and promoting “a new perspective on the patient, viewed also as a client, bringing their own cultural and traditional background” (Ministero della Salute, 2011, p. 30 in Annex 1).

Regarding the active involvement of users in the service, no recommendations are provided. The focus is solely on one-way communication from the facility to the users, such as through the service charter.

3.5 Sustainability

The guidelines recommend implementing waste reduction strategies throughout the entire supply chain, starting with careful meal planning and procurement of necessary supplies. They emphasize the systematic tracking of production surpluses and food waste and the establishment of a standardized monitoring procedure. The guidelines reference the “Guidelines for organizations managing school, workplace, hospital, social, and community cafeterias to prevent and reduce food waste associated with meal provision” (Ministero della Salute, 2018 in Annex 1). For measures aimed at reducing the environmental impact of the service, the guidelines refer to the Minimum Environmental Criteria (Criteri Ambientali Minimi, CAM) for collective catering services and food supply. These criteria, initially defined in 2011, were revised in 2020 to address technological, organizational, and regulatory

developments in the sector (Ministero dell'ambiente e della tutela del territorio e del mare, 2020 in Annex 1).

The procurement of food with specific qualities, such as freshness, traditional or typical products, and those sourced from organic farming, integrated pest management, social farming, fair trade, local, and short supply chains, is encouraged to reduce the environmental impact and support the local economy. The inclusion of organic, traditional, and typical foods, as well as those protected by European Union-recognized designations of origin, in the daily diet of collective canteens was already established by a 2009 regulation (Law 488, Article 59(4) in Annex 1), which has been described as “a highly innovative law” (Morgan & Sonnino, 2008, p. 71). The law mandated that the awarding of public catering contracts be based on the quality of the agricultural products offered, establishing a direct and explicit connection between the promotion of organic and high-quality agriculture and public sector catering. The 2011 CAM required at least 40% by weight of organic products and an additional 20% by weight of fruits and vegetables produced via integrated pest management across all areas of collective canteens. The updated 2020 CAM raised the minimum requirement to 50% for catering services dedicated to children and young people while leaving the determination of minimum quotas for healthcare and social assistance catering to the contracting authority. Seasonal compliance is guided by Annex A: Seasonality Calendar included in the 2020 CAM.

3.6 Implementation of guidelines

The implementation of the guidelines is ensured through the following:

- The presence of qualified personnel in at least the following areas:
 - i) overall supervision of the service and hygiene-health aspects; ii) dietary and clinical/nutritional aspects; and iii) product quality control.
- Collaboration between professionals from different fields and between facility staff and catering service staff in cases of outsourced services.
- Staff training.
- User information about service characteristics through the service charter.
- Service monitoring and control.

The latter is entrusted to the contracting authority in cases where the service is regulated by a contract specification, such as in hospital catering. It

includes measuring user satisfaction, even indirectly (e.g., by monitoring food waste), conducting random document checks, and performing onsite inspections. Monitoring must cover all stages of the food cycle and be carried out jointly by all designated professionals within their respective areas of expertise, using tailored forms validated by healthcare management. The identification of responsible parties and the explicit definition of monitoring methods must be included in the drafting of contract specifications, as outlined in the document “Evaluation of National Nutritional Challenges and Intervention Strategies 2016–19” (Ministero della Salute, 2016). Monitoring is also entrusted to the facility and the catering company in the case of outsourced services. This is achieved through mandatory measures to ensure compliance with hygiene, health, and product quality standards, as well as adherence to CAM requirements. Voluntary measures, such as quality certifications and reference to standards defined by recognized bodies, may also be applied. Examples include the following (see Annex 1):

- The EC 1 UNI 11407:2020 standard, “Collective Catering Services – Minimum Requirements for Drafting Contract Specifications.”
- The UNI 11584:2021 standard, “Collective Catering Services – Minimum Requirements for Menu Design.”
- The UNI 11941:2024 standard, “Guidelines for Determining Food and Beverage Textures for Individuals with Dysphagia,” based on the 2013 International Dysphagia Diet Standardisation Initiative.

3.7 Regional and subregional initiatives

The documents issued by the Italian regions and local health authorities show significant similarities, reflecting the national guidelines (Table 2). The differences do not focus on the variety of food products available in different territorial contexts or on different culinary traditions, as one might have expected. In fact, local specificities are largely ignored in the common reference to the MD. Only the regions of Veneto and Friuli Venezia Giulia, as well as the local health authority of Trani, emphasize the importance of including recipes and flavors from local traditions, especially during holidays, because these tastes are especially familiar and recognizable to elderly users. With the creation of the ‘home-like atmosphere’ concept, the region of Veneto encourages offering traditional food, such as polenta, and even a limited amount of wine at the discretion of the attending physician.

Some differences are found in aspects related to meal presentation, the dining environment, and social interactions. In Sardinia and Piedmont, the importance of the organoleptic qualities of food in meal preparation for older

people is highlighted. The topic of the dining environment is specifically addressed in the guidelines of Piedmont and Emilia Romagna, where particular attention is given to the warmth and comfort of spaces. The Emilia Romagna region promotes the use of chromotherapy, natural lighting, and wall art to create a more homely and welcoming atmosphere. The Piedmont region encourages access to green spaces during meals to foster a more pleasant and relaxing experience. Additionally, the dining room must be accessible to all patients, including those with severe disabilities, promoting their integration during mealtimes and fostering a sense of conviviality. The Veneto region, consistent with its emphasis on foods that evoke familiar flavors, also stresses the importance of creating a family-like setting for meal consumption.

The theme of actively involving users and their families in food service appears in some regional guidelines. The importance of the role of family members in evaluating the quality of services and meals provided is particularly emphasized. The Piedmont region explicitly mentions creating a committee of relatives to assess food service according to shared and defined criteria. The Emilia Romagna region promotes informing family members about aspects of the service, encouraging them to provide feedback on residents' preferences. The Veneto region aims to educate the committee of relatives so that family members have a theoretical and practical understanding of menu planning. The Pavia guidelines specify that physical activity and hydration should be perceived by residents as opportunities for socializing with other guests. The Friuli Venezia Giulia region fosters relationships with volunteer organizations by organizing cultural and recreational events to encourage social interaction among residents and with the surrounding community. Meal times, although specified in the national guidelines, have been adjusted in some regional guidelines to minimize the hours between meals, preventing patients from experiencing prolonged fasting. In Emilia Romagna, dinner is delayed by 30 minutes compared with the most commonly used schedule in facilities. The guidelines of this region also stand out for their sensitivity toward families. Facilities are open to family members during mealtimes, allowing them, following staff guidance, to contribute to creating a calm and convivial atmosphere.

Some regions stand out as advanced and pioneering, anticipating national guidelines or experimenting with innovative processes in various areas of intervention. The Piedmont region is among the first to have developed its own guidelines, distinguishing itself by building recommendations on the basis of a survey of the state of the art and best practices. In 2007, it produced Operational Proposals for Catering in Care Facilities and Operational Proposals for Hospital Catering (Regione Piemonte, 2007a and 2007b in Annex 1). The project "Collective Catering in Hospitals and Care Facilities for the Elderly:

Development of Good Practices,” conducted between 2008 and 2010, allowed for a comprehensive survey on healthcare catering across the entire national territory. Recommendations were developed on the basis of the survey results (Regione Piemonte, 2011 Annex 1). In 2022, a survey was conducted again, this time only in Piedmont facilities, to look at changes over the past ten years. The findings led to the Operational Proposals for Hospital and Care Facility Catering in the Piedmont Region (Regione Piemonte, 2023 in Annex 1).

The Lombardy region stands out as one of the most advanced regions in Italy, particularly in terms of hospital food, having developed specific guidelines as early as 2009. With Decree no. 14890 of October 18, 2022, the Regional Clinical Nutrition Network was implemented, establishing the requirement for the creation of nutritional teams in facilities where there were not already clinical nutrition units. With Resolution DGR XII/1812 of January 29, 2024, it became the first region in Italy to implement nutritional screening pathways within 24 hours of hospitalization for all patients upon admission to regional health system facilities. The goal is to standardize the assessment of nutritional risk to identify patients who require more in-depth evaluation and early nutritional intervention through an appropriate treatment protocol. Furthermore, the resolution also requires the training of personnel to ensure the effective implementation and management of the nutritional screening and treatment process, which is integrated within therapeutic care.

The guidelines of the Friuli Venezia Giulia region emphasize the importance of adapting diets on the basis of the pathological conditions of the elderly through systematic nutritional screening.

Table 2. Similarities and Differences among the National, Regional, and Local Guidelines.

Similarities	Differences
Reference to MD and LARN	Environmental and Meal Timing Adaptations
Focus on Clinical Nutrition	Inclusion of Family Members
Food Waste Monitoring	Emphasis on Social Interaction among Residents and with the Surrounding Communities
Nutritional Screening and Malnutrition Prevention	Cultural and Regional Food Preferences
Support for Patients without Autonomy	
Information and Communication	
Education and Training	
Monitoring and Evaluation of the Service	

4. Discussion and conclusion

This paper provides an insightful analysis of national and local guidelines developed in Italy regarding catering services in care homes for older people. Although the study did not formally apply Bacchi's WPR approach (2009), as

its primary objective was to describe and synthesise the content of existing guidelines rather than to conduct a structured critical policy analysis, this perspective helps illuminate how the guidelines themselves construct what is considered “the problem” in food services for older people—primarily malnutrition and clinical risk—while relying on assumptions that privilege standardised nutritional prescriptions over experiential, relational, and environmental aspects. At the same time, a WPR-informed reading helps highlight what remains less articulated in the documents, such as the quality of mealtime environments, the social and cultural dimensions of eating, the active involvement of users in menu definition and monitoring, and the practical conditions that shape implementation and control mechanisms.

The guidelines indicate that the nutrition of older patients in care facilities is seen as a tool primarily aimed at preventing and treating diseases to ensure healthy aging. The focus is on the problem of elders’ malnutrition and the systems in place to monitor, prevent, and address it. The literature review by Rand et al. (2024) found that studies have tended to apply a medicalised lens to the topic, framing malnutrition and dehydration as the primary focus of interventions. The therapeutic goal of meals is addressed across the guidelines, both through dietary recommendations and the emphasis on coordination between medical staff and nutrition personnel. Other aspects, however, beyond clinical concerns, need attention in regard to the diets of older individuals in care homes or community settings. The acceptance of meals is influenced by factors such as taste, meal appearance, the older person’s ability to feed themselves independently or with staff assistance, social interactions, and the timing and setting of the meal. This integrated approach aims to ensure that, despite dietary restrictions and individuals’ frailty, meals remain appetizing and easily accepted by residents. Such an approach necessarily requires awareness, adequate training, and the collaboration of all stakeholders involved in the service, grounded in processes of communication, transparency, and accountability throughout the chain (Wang et al., 2018; Hoefnagels et al., 2023). Quality nutrition is not only about choosing the best products, but also about the presentation of meals, the method of serving, and the welcoming nature of the spaces where meals are consumed. This approach refers to the widely debated relational value of food, which is not just a means of sustenance but, owing to its strong symbolism, can connect individuals to their regions and to their social and moral expectations (Appadurai, 1981; Bell & Valentine, 1997; Dansero et al., 2017; Falk et al. 1996).

Such an approach necessarily requires awareness, adequate training and the collaboration of all stakeholders involved in the service, grounded in processes of communication, transparency, and accountability throughout the chain (Hoefnagels et al., 2023; Wang et al., 2018).

With a preference for local and sustainable foods and the monitoring of food waste, collective catering for the older people becomes a prime setting for implementing policies of relocalization and moralization of food systems (Jackson et al., 2009; Morgan, 2010; Morgan et al., 2006) aimed at reorganizing the production, processing, distribution, consumption, and recovery of food in a more sustainable, equitable, and inclusive way (Berti et al., 2023; Ilieva, 2016). Viewed through this lens, collective catering for the older population becomes a potential political tool to promote social well-being, food security, environmental sustainability, and public health goals.

According to several authors (Donini et al., 2008; Flanel & Fairchild, 1995), quality verification yields a constant improvement in the quality of the catering service. The lack of a systematic monitoring system for the implementation of the guidelines can be seen as the main limitation in the implementation of food policies. According to Morgan and Sonnino (2010), this is due to the inability of institutions to manage the transition from theory to practice.

The guidelines are merely soft law, meaning documents with a propositional and guiding function that are not directly binding (Senden, 2004). Their content can be incorporated into ministerial or regional legislation. This is the case, for example, with nutritional screening to combat the problem of malnutrition in hospitalized older patients, or with the coordination of healthcare staff and those with nutritional expertise into a single team, which has been made mandatory by the Lombardy region.

Articles 213(2) of the Public Contracts Code (Legislative Decree No. 50 of 2016) grants guidelines regulatory power that is expressed in the detailed regulation of public procurement procedures. If the catering service is governed by a public contract outlined in detail in the tender specifications—as is the case for public hospital facilities—the guidelines become binding if they are cited as a reference document for the service. Specifically, the identification of those responsible and the specification of monitoring methods must be included in the drafting of the tender specifications, as stated in the 2016-2019 Evaluation of National Nutritional Issues and Intervention Strategies (Ministero della Salute, 2016). In facilities not regulated by a tender specification—such as social health and social care facilities—the margins of discretion are much broader because monitoring is entrusted to the care facility and the catering company in the case of outsourced services. This is done through mandatory measures to verify compliance with hygiene, health, and product standards, as well as CAM requirements, or voluntary measures such as quality certifications and adherence to standards set by recognized bodies. In the Campania regional guidelines, the introduction of a reference center for public and collective catering, aimed at training and informing staff, reviewing design aspects, and revising tender specifications, is particularly noteworthy. It provides a useful

tool to bridge the gap between the intentions of the guidelines and their actual implementation.

The multitude of guidelines in Italy, where in addition to the national guidelines, there are documents developed at the level of individual regions and, in some cases, even local health authorities, might suggest that these documents take local specificities into account in the design of collective catering services for elderly individuals. The MD is cited as the preferred dietary model in almost all the documents analyzed, but this contradicts what is stated regarding the use of local, regional, and traditional ingredients. In many Italian regions, particularly in North Italy, the foods typical of the MD are not typical or locally produced. In this context, the discussion of territoriality in relation to dietary models seems, in our view, controversial and rhetorical.

Guidelines often appear repetitive, contributing to fragmentation both geographically (national, regional, and local) and in terms of areas of intervention (schools, hospitals, social care, etc.), which is not beneficial for effective implementation. In Lombardy, new regional guidelines are currently being drafted with the aim of addressing the multiplicity of documents currently in force in the region, including those at the provincial level. The document will refer to the national guidelines, overcoming the diversification of areas of intervention. This approach follows the example of the guidelines from the Liguria and Campania Regions, which chose to consolidate recommendations for all sectors into a single regional document. This strategy aims to address the confusion caused by the heterogeneity and multiplicity of documents—whether related to geographical scale or area of intervention—that are currently in force across individual regions and provinces.

In fact, the heterogeneity of the guidelines appears to be more formal than substantial. While they differ in some aspects, they show significant similarities, aligning with what has already been outlined in the national guidelines. The diversity of recommendations reflects the regulatory fragmentation in the healthcare domain due to the regional autonomy of the Italian administrative and political system. It seems to be of little use, however, in guiding the managers of care facilities for older people, who often operate across regions and therefore have to address different guidelines for the same service if it falls within different regions. In addition to fragmentation, there is a lack of coordination among various authorities on healthy eating, even at a national level. The national guidelines make no mention of the Guidelines for Healthy Eating, first drafted in 1986 and now in their fourth edition. Along with the LARN, these constitute the primary reference for the country's food policies, being “the only official institutional guidelines to steer citizens toward a balanced diet” (Crea, 2019, p. 15 in Annex 1). There does not seem to be a direct connection with the work done by the Food and Nutrition Research

Center, which falls under a different Ministry than the Ministry of Health—namely, the Ministry of Agriculture, Food Sovereignty, and Forestry.

The reference to supranational guidelines is limited to citing the 2002 ESPEN (European Society for Clinical Nutrition and Metabolism) Guidelines for Nutrition Screening—while the numerous other ESPEN guidelines are ignored—and the recommendations of the Committee of experts on nutrition, food safety, and consumer protection (2001 in Annex 1) for the prevention of undernutrition in hospitals.

The absence of explicit references to other institutional documents within the guidelines can make it difficult to harmonize the various types of recommendations and create operational uncertainties for both sector professionals and end users, thereby compromising the effectiveness of policies aimed at promoting healthy eating for the older population.

The national guidelines acknowledge that they are geared toward practicality and immediate use, but they draw on scientific literature for validation. In particular, they explicitly refer to the MD model, which is characterized by a predominance of plant-based products. A more precise definition of what is meant by the MD can be found in the CAM from the Ministry of the Environment and Protection of Land and Sea (Ministero dell'ambiente e della tutela del territorio e del mare, 2020 in Annex 1). In Section E, “Environmental Criteria for the Assignment of Collective Catering Services for Hospitals, Care Facilities, Social Healthcare Centers, and Detention Facilities”, this document references the UNI/PdR 25:2016 Practice Guidelines: “Guidelines for Promoting a Lifestyle and Culture Conducive to Sustainable Development” (Consorzio Promos Ricerche and UNI Ente italiano di normazione, Annex 1, 2016). According to this document, the food pyramid graphically represents the new dietary model for the peoples of the Mediterranean and is aimed at individuals aged between 18 and 65 (!). There are detailed discussions on specific foods: pasta, bread and cereals, extra virgin olive oil, wine (!), vegetables, and fruits. Adherence to the MD is entrusted to the use of self-monitoring digital tools to calculate the MD adequacy index, as suggested in the document 2016-2019 Assessment of National Nutritional Issues and Intervention Strategies.

As demonstrated in the study conducted by Bamford et al. (2012) in the United Kingdom, the consistency between what is outlined in the guidelines and the actual implementation within facilities is often compromised by various factors, including: operators' limited knowledge of the nutritional content of food; the lack of financial resources for the concrete implementation of the recommendations (such as the use of high-quality raw materials); the complexity and unreliability of supply systems; and the absence of effective and constant monitoring of guideline implementation. The issue of inadequate staff

training, which significantly impacts the implementation of guidelines, was also addressed in the recent work of Marcotrigiano et al. (2023). These authors noted noncompliance with menu guidelines in both school and healthcare facilities in some provinces of Puglia. In this context, creating opportunities for training, updating, and in-depth study for staff in care facilities for older people, as well as for local health authority personnel responsible for menu validation, is crucial, as highlighted in the works of Hoefnagels et al. (2023), Suominen et al. (2007), Wikby et al. (2009).

Rand et al. (2024) observe that developing recommendations for nutrition services in institutional settings for older adults is far from straightforward, given the inherent complexity of both the context and the phenomenon being studied. “There is considerable complexity here”, they say (p. 203). On the one hand, such complexity calls for synthesis, clear and actionable guidance, and the avoidance of redundant or overlapping recommendations. On the other hand, it is equally important to acknowledge the diversity of cultural and regional contexts—an aspect that existing guidelines often overlook—and “the challenge of moving away from ‘quick-fix’ responses to those that fully consider the systems level” (p. 204).

To conclude, it is important to emphasize what was highlighted in the introduction of this work regarding the role of formulating guidelines that are consistent with the needs of local regions to produce food policies capable of significantly influencing the dynamics of the entire food supply chain (Berti et al., 2023; Dansero et al., 2017; Pezzana et al., 2015; Toldo, 2017). The dietary choices recommended in various guidelines—such as those related to sourcing from local producers through short supply chains and the use of local raw materials—if truly implemented, not only contribute to environmental sustainability but also strengthen the socioeconomic fabric of communities (Sonnino, 2009). This interaction between care facilities and local regions can provide an opportunity to increase local food resources, promote more sustainable practices, and ensure healthier diets for a growing older population, while also preventing the ‘public plate’ from exacerbating the environmental challenges for which food systems are responsible (Battisti et al., 2023). This is especially relevant given the strong relationships between regions, their food identity (i.e., the availability of local and traditional foods), and food choices (Simeone & Verneau, 2024). Local food traditions are an essential part of culture and society, reflecting a community’s history, values, and beliefs—a connection that holds special significance for older adults (D’Andrea & D’Ulizia, 2023).

The presence of numerous locally drafted documents has not yet led to the structuring of collective catering services capable of enhancing the specific characteristics of regions and their related food practices. This appears to have

happened because most regional documents replicate the national guidelines without adapting them to the dynamics and specificities of the local regions.

The solution to these issues, in our opinion, does not lie in standardizing regulations to completely eliminate the various local guidelines, but rather in developing a genuine synergy between supranational, national, and local regulations. Only in this way can guidelines—and food policies in a broader sense—not only function as regulatory instruments but also reflect broader social and regional processes tied to the specificities of places (Toldo, 2017).

5. Limitations of the research

The research focuses on the Italian context, which, despite offering an interesting case study due to the high indicators of population aging and the richness of food traditions spread across regions, largely linked to the MD, cannot be considered representative of what is happening in other countries facing the same challenges of healthy aging, food security, and sustainability of food systems. A comparison with policies in other countries would certainly be an interesting aim for future research.

Authors' contributions

AA conceptualized the study, reviewed the literature, collected, analysed the data, and wrote the original draft. FP acquired the funding, contributed to the conceptual development of the study, and reviewed the manuscript. LC made substantial contributions to the conception, collection, and analysis of the data. EP acquired the funding, conceptualized the study, contributed to the collection and analysis of the data, wrote the original draft, and reviewed the manuscript. All authors have read and approved the manuscript.

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References

- Appadurai, A. (1981). Gastro-Politics in Hindu South Asia. *American Ethnologist*, 8(3), 494-511.
- Bacchi, C. (2009). *Analysing policy. What's the problem represented to be?*. Frenchs Forest: Pearson.
- Bamford, C., Heaven, B., May, C., & Moynihan, P. (2012). Implementing nutrition guidelines for older people in residential care homes: a qualitative study using normalization process theory. *Implementation Science*, 7, 106. <https://doi.org/10.1186/1748-5908-7-106>
- Battisti, L., Dansero, E., Epifani, F., & Graziano, T. (2023). Emplacing food, ovvero ripensare il rapporto cibo-spazio. Prospettive di ricerca. *Rivista Geografica Italiana*, 80(4), 5-16. <https://doi.org/10.3280/rgioa4-2023oa16842>
- Bell, D., & Valentine, G. (1997). *Consuming Geography. We are where we eat*. London: Routledge.
- Berti, G., Cuomo, F., Dansero, E., Di Benedetto, S., Galli, F., Monteleone, S., & Pettenati, G. (2023). Le Food policy in una prospettiva multi e transcalare. *Rivista Geografica Italiana*, 80(4), 17-36. <https://doi.org/10.3280/rgioa4-2023oa16843>
- Calligaris, S., Moretton, M., Melchior, S., Mosca, A. C., Pellegrini, N., & Anese, M. (2022). Designing food for the elderly: the critical impact of food structure. *Food & function*, 13(12), 6467-6483. <https://doi.org/10.1039/d2fo00099g>
- Chiarelli, M. (2020). Il *soft law* e le linee guida nella pandemia. *Corti supreme e salute*, 3, 619-626.
- Cumming, E., & Henry, W. E. (1961). *Growing old*. New York: Basic.
- D'Andrea, A., & D'Ulizia, A. (2023). Preserving Local Food Traditions: A Hybrid Participatory Approach for Stimulating Transgenerational Dialogue. *Societies*, 13, 95. <https://doi.org/10.3390/soc13040095>
- Dansero, E., Pettenati, G., & Toldo, A. (2017). Il rapporto fra cibo e città e le politiche urbane del cibo: uno spazio per la geografia? [The Relationship between Food and Cities and Urban Food Policies: a Space for Geography?]. *Bollettino della Società Geografica Italiana*, 12(10), 5-22.
- Diez-Garcia, R. W., de Sousa, A. A., Proença, R. P., Leandro-Merhi, V. A., & Martinez, E. Z. (2012). Gauging food and nutritional care quality in hospitals. *Nutrition Journal*, 11, 66. <https://doi.org/10.1186/1475-2891-11-66>
- Dinu, M., Pagliai, G., Casini, A., & Sofi, F. (2018). Mediterranean diet and multiple health outcomes: an umbrella review of meta-analyses of observational studies and randomised trials. *European journal of clinical nutrition*, 72(1), 30-43. <https://doi.org/10.1038/ejcn.2017.58>

Nutrition and Food Practices in Italian Older Population's Care Facilities: An
In-Depth Analysis of Public Guidelines and Recommendations
Annachiara Autiero, Lucrezia Ciappelloni, Fabrizio Pecoraro, Elena Pagliarino

- Donini, L. M., Castellaneta, E., De Guglielmi, S., De Felice, M. R., Savina, C., Coletti, C., Paolini, M., & Cannella, C. (2008). Improvement in the quality of the catering service of a rehabilitation hospital. *Clinical Nutrition*, 27(1), 105-114. <https://doi.org/10.1016/j.clnu.2007.10.004>
- Donini, L. M., Riti, M., Castellaneta, E., Ceccarelli, P., Civalè, C., Passaretti, S., del Balzo, V., & Cannella, C. (2009). Indagine conoscitiva sui dietetici ospedalieri [A survey on diet manuals in Italian hospitals]. *Annali di Igiene: Medicina Preventiva e di Comunità*, 21(6), 575-585.
- Eurostat. (2022). *How many healthy life years for EU men and women?* <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220613-1>
- Falk, L. W., Bisogni, C. A., & Sobal, J. (1996). Food choice processes of older adults: a qualitative investigation. *Journal of Nutrition Education*, 28(5), 257-265. [https://doi.org/10.1016/S0022-3182\(96\)70098-5](https://doi.org/10.1016/S0022-3182(96)70098-5)
- Field, M. J., & Lohr, K. N. (1990). *Clinical Practice Guidelines: Directions for a New Program*, Washington: National Academies Press. <https://doi.org/10.17226/1626>
- Flanel, D. F., & Fairchild, M. M. (1995). Continuous Quality Improvement in Inpatient Clinical Nutrition Services. *Journal of the American Dietetic Association*, 95(1), 65-74. [https://doi.org/10.1016/S0002-8223\(95\)00015-1](https://doi.org/10.1016/S0002-8223(95)00015-1)
- Fosti, G., Notarnicola, E., & Perobelli, E. (2025). *Il settore Long Term Care tra connessioni, interdipendenze e necessità di integrazione 7° Rapporto Osservatorio Long Term Care*, Milano: Egea.
- Hoefnagels, F. A., Patijn, O. N., Meeusen, M. J. G., & Battjes-Fries, M. C. E. (2023). The perceptions of food service staff in a nursing home on an upcoming transition towards a healthy and sustainable food environment: a qualitative study. *BMC Geriatrics*, 23, 784. <https://doi.org/10.1186/s12877-023-04493-x>
- Ilieva, R. T. (2016). *Urban food planning: Seeds of Transition in the Global North*. Abingdon and New York: Routledge.
- ISTAT. (2023). *Rapporto annuale 2023. La situazione del Paese*. <https://www.istat.it/storage/rapporto-annuale/2023/Rapporto-Annuale-2023.pdf>
- ISTAT. (2024). *Population and Household Projections*. <https://demo.istat.it/data/previsionifamiliari/Population-and-households-projections-EN.pdf>
- Jackson, P., Ward, N., & Russel, P. (2009). Moral economies of food and geographies of responsibility. *Transactions of the Institute of British Geographers*, 34(1), 12-24. <https://doi.org/10.1111/j.1475-5661.2008.00330.x>
- Jennings, S. (2025). Mediterranean Diet Ranked Best Diet Overall for 8th Consecutive Year, *Patient Care*, January 6, 2025.

- <https://www.patientcareonline.com/view/mediterranean-diet-ranked-best-diet-overall-for-8th-consecutive-year>
- Kaur, D., Rasane, P., Singh, J., Kaur, S., Kumar, V., Mahato, D. K., Dey, A., Dhawan, K., & Kumar, S. (2019). Nutritional Interventions for Elderly and Considerations for the Development of Geriatric Foods. *Current aging science*, 12(1), 15-27.
<https://doi.org/10.2174/1874609812666190521110548>
- Keys, A., & Keys, M. (1975). *How to eat well and stay well. The Mediterranean way*. New York: Doubleday.
- Leroi, I. (2020). Time for dinner: the communal dining room in care homes and its impact on nutritional outcomes. *International Psychogeriatrics*, 32(7), 803-805. <https://doi.org/10.1017/S1041610220000101>
- Lindland, E., Fond, M., Haydon, A., & Kendall-Taylor, N. (2015). *Gauging aging: Mapping the gaps between expert and public understandings of aging in America*. FrameWorks Institute.
<https://www.frameworksinstitute.org/publication/gauging-aging-mapping-the-gaps-between-expert-and-public-understandings-of-aging-in-america/>
- Marcotriggiano, V., Stingi, G. D., Nugnes, P. T., Mancano, S., Lagreca, V. M., Tarricone, T., Salerno, G., Pasquale, P., Marchet, P., Sava, G. A., Citiulo, A., Tissi, M., Oliva, S., Cinquetti, S., & Napoli, C. (2023). Collective Catering Activities and Official Controls: Dietary Promotion, Sustainability and Future Perspectives. *Healthcare*, 11(9), 1347.
<https://doi.org/10.3390/healthcare11091347>
- Ministero della Salute (Ministry of Health). (2011). *Linee di indirizzo nazionale per la ristorazione ospedaliera e assistenziale*.
https://www.salute.gov.it/imgs/C_17_pubblicazioni_1435_allegato.pdf
- Ministero della Salute (Ministry of Health). (2016). *Valutazione delle criticità nazionali in ambito nutrizionale e strategie d'intervento 2016-19*.
https://www.salute.gov.it/imgs/C_17_pubblicazioni_3108_allegato.pdf
- Ministero della Salute (Ministry of Health). (2021). *Linee di indirizzo nazionale per la ristorazione ospedaliera, assistenziale e scolastica*.
https://www.salute.gov.it/imgs/C_17_pubblicazioni_3141_allegato.pdf
- Morgan, K. (2008). Greening the Realm: Sustainable Food Chains and the Public Plate. *Regional Studies*, 42(9), 1237-1250.
<https://doi.org/10.1080/00343400802195154>
- Morgan, K. (2010). Local and Green, Global and Fair: The Ethical Foodscape and the Politics of Care. *Environment and Planning A: Economy and Space*, 42(8), 1852-1867. <https://doi.org/10.1068/a42364>
- Morgan, K., & Sonnino, R. (2008). *The School Food Revolution: Public Food and the Challenge of Sustainable Development*. London: Earthscan.

- Morgan, K., & Sonnino, R. (2010). The urban foodscape: world cities and the new food equation. *Cambridge Journal of Regions, Economy and Society*, 3(2): 209-224. <https://doi.org/10.1093/cjres/rsq007>
- Morgan, K., Marsden, T., & Murdoch, J. (2006). *Worlds of Food*. Oxford: Oxford University Press.
- ORICON (Osservatorio ristorazione collettiva e nutrizione). (2021). *La Ristorazione Collettiva dalla Pandemia a oggi - Indagine ORICON 2021*. https://www.oricon.it/wp-content/uploads/2022/06/Relazione-Indagine-2021-Oricon_def.pdf
- Pezzana, A., Cereda, E., Avagnina, P., Malfi, G., Paiola, E., Frighi, Z., Capizzi, I., Sgnaolin, E., & Amerio, M. L. (2015). Nutritional Care Needs in Elderly Residents of Long-Term Care Institutions: Potential Implications for Policies. *The Journal of Nutrition Health and Aging*, 19(9), 947-954. <https://doi.org/10.1007/s12603-015-0537-5>
- Rand, S., Bertini, L., Dargan, A., Raats, M., & Sharp, R. (2024). Developing a framework for reflection on policy-relevant care research using a study of older adults' food and drink care-related needs, *International Journal of Care and Caring*, 8(1), 199-205. <https://doi.org/10.1332/23978821Y2023D000000018>
- Senden, L. (2004). *Soft Law in European Community Law*. Oxford: Hart Publishing.
- Simeone, M., & Verneau, F. (2024). In support of framing Food Identity towards pro-environmental food choices through empirical, *Quality & Quantity*, <https://doi.org/10.1007/s11135-023-01826-1>
- Sofi, F., Macchi, C., Abbate, R., Gensini, G. F., & Casini, A. (2013). Mediterranean diet and health status: an updated meta-analysis and a proposal for a literature-based adherence score. *Public Health Nutrition*, 17(12), 2769-2782. <https://doi.org/10.1017/S1368980013003169>
- Sonnino, R. (2009). Feeding the city: Toward a new research and planning agenda. *International Planning Studies*, 14(4), 425-435. <https://doi.org/10.1080/13563471003642795>
- Suominen, M. H., Kivisto, S. M., & Pitkala, K. H. (2007). The effects of nutrition education on professionals' practice and on the nutrition of aged residents in dementia wards. *European Journal of Clinical Nutrition*, 61, 1226-1232. <https://doi.org/10.1038/sj.ejcn.1602639>
- Toldo, A. (2017). Public Procurement e ristorazione collettiva. Le mense scolastiche come strumento di sostenibilità dei sistemi alimentari. *Bollettino della Società Geografica Italiana*, 13(10), 131-148. <https://doi.org/10.13128/bsgi.v10i1-2.500>
- United Nations. (2024). *World Population Prospects 2024*. <https://population.un.org/wpp/Download/Standard/Population/>

- Wang, D., Everett, B., Northall, T., Villarosa, A. R., & Salamonson, Y. (2018). Access to food choices by older people in residential aged care: An integrative review, *Collegian*, 25(4), 457-465. <https://doi.org/10.1016/j.colegn.2017.11.004>
- Wikby, K., Ek, A. C., & Christensson, L. (2009). Implementation of a nutritional programme in elderly people admitted to resident homes. *Scandinavian Journal of Caring Sciences*, 23(3), 421-430. <https://doi.org/10.1111/j.1471-6712.2008.00632.x>
- World Health Organization. (2002). *Active Aging. A policy Framework. A contribution of the World Health Organization to the Second United Nations World Assembly on Aging, Madrid, Spain, April*. <https://extranet.who.int/agefriendlyworld/wp-content/uploads/2014/06/WHO-Active-Aging-Framework.pdf>
- World Health Organization. (2022). *Aging and Health*. <https://www.who.int/news-room/fact-sheets/detail/aging-and-health#:~:text=At%20this%20time%20the%20share,2050%20to%20reach%20426%20million>
- World Health Organization. (2024). *WHO and Italian National Institute of Health sign memorandum of understanding to improve care for healthy aging*. <https://www.who.int/news/item/07-06-2024-who-and-italian-national-institute-of-health-sign-memorandum-of-understanding-to-improve-care-for-healthy-ageing>

Annex 1. List of analyzed documents.

SUPRANATIONAL DOCUMENTS			
Institution	Year	Title	Link
Beck A. M. et al., Council of Europe (the Committee of Experts on Nutrition, Food Safety and Consumer Health of the Partial Agreement in the Social and Public Health Field)	2001	Food and nutritional care in hospitals: how to prevent undernutrition. Report and guidelines from the Council of Europe	10.1054/clnu.2001.0494
Kondrup J., Allison S. P., Elia M., Vellas B., Plauth M., Educational and Clinical Practice Committee, European Society of Parenteral and Enteral Nutrition (ESPEN)	2003	Guidelines for Nutrition Screening	http://espen.info/documents/Screening.pdf

Nutrition and Food Practices in Italian Older Population's Care Facilities: An
In-Depth Analysis of Public Guidelines and Recommendations
Annachiara Autiero, Lucrezia Ciappelloni, Fabrizio Pecoraro, Elena Pagliarino

NATIONAL DOCUMENTS			
Institution	Year	Title	Link
Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria, Centro Ricerca Alimenti e Nutrizione (Crea)	2018	Linee guida per una sana alimentazione (revisione 2018)	https://www.crea.gov.it/documents/59764/0/LINEE-GUIDA+DEFINITIVO+%281%29.pdf/3c13ff3d-74dc-88d7-0985-4678acc18537?t=1579191262173
Ministero dell'ambiente e della tutela del territorio e del mare	2020	Criteri Ambientali Minimi per il servizio di ristorazione collettiva e fornitura di derrate alimentari	https://www.gazzettaufficiale.it/eli/id/2020/04/04/20A01905/sg
Ministero della Salute	2021	Linee di indirizzo nazionale per la ristorazione ospedaliera, assistenziale e scolastica	https://www.salute.gov.it/imgs/C_17_pubblicazioni_3141_allegato.pdf
Ministero della Salute	2018	Linee di indirizzo rivolte agli enti gestori di mense scolastiche, aziendali, ospedaliere, sociali e di comunità, al fine di prevenire e ridurre lo spreco connesso alla somministrazione degli alimenti	http://www.salute.gov.it/imgs/C_17_pubblicazioni_2748_allegato.pdf
Ministero della Salute	2016	Valutazione delle criticità nazionali in ambito nutrizionale e strategie d'intervento 2016-19	https://www.salute.gov.it/imgs/C_17_pubblicazioni_3108_allegato.pdf
Ministero della Salute	2011	Linee di indirizzo nazionale per la	https://www.salute.gov.it/imgs/C_17_pubblicazioni_1435_allegato.pdf

		ristorazione ospedaliera e assistenziale	
Ministero della Salute	2017	Linee di indirizzo sui percorsi nutrizionali nei pazienti oncologici	https://www.salute.gov.it/imgs/C_17_pubblicazioni_2682_allegato.pdf
Repubblica Italiana	1999	Legge 23 Dicembre 1999, n. 488, Art. 59, comma 4, Misure per agevolare lo sviluppo dell'agricoltura biologica e di qualità	https://www.gazzettaufficiale.it/eli/id/2000/01/29/00A00641/sg
Società Italiana di Nutrizione Umana (SINU)	2024	Livelli di Assunzione di Riferimento di Nutrienti ed energia per la popolazione italiana (LARN) V Revisione	
UNI Ente italiano di normazione	2020	Servizi di ristorazione collettiva - Requisiti minimi per la progettazione di capitolato di appalto	https://store.uni.com/ec-1-2020-uni-11407-2020
UNI Ente italiano di normazione	2021	Servizi di ristorazione collettiva – Requisiti minimi per la progettazione di menù	https://conto.uni.com/uni-11584-2021
UNI Ente italiano di normazione	2024	Linee guida per la determinazione delle consistenze di alimenti e bevande destinati ai soggetti disfagici	https://store.uni.com/uni-11941-2024
Consorzio Promos Ricerche and UNI Ente italiano di normazione	2016	Prassi di riferimento sulla Dieta Mediterranea	https://www.promosricerche.org/pubblicazioni/libri-rapporti-e-brochure/prassi-di-riferimento-sulla-dieta-mediterranea-uni-pdr-25-2016-2016-2

Nutrition and Food Practices in Italian Older Population's Care Facilities: An
In-Depth Analysis of Public Guidelines and Recommendations
Annachiara Autiero, Lucrezia Ciappelloni, Fabrizio Pecoraro, Elena Pagliarino

		(UNI/PdR 25:2016) Dieta Mediterranea patrimonio immateriale UNESCO - Linee guida per la promozione di uno stile di vita e di una cultura favorevole allo sviluppo sostenibile	
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REGIONAL DOCUMENTS			
Institution	Year	Title	Link
Regione Campania	2021	Linee di indirizzo della Regione Campania per la sicurezza alimentare e sicurezza nutrizionale nella ristorazione collettiva	http://polointegrato.it/cripat/wp-content/uploads/sites/4/2023/12/LINEE-GUIDA-per-la-Sicurezza-Alimentare-e-sicurezza-nutrizionale-nella-ristorazione-collettiva.pdf
Regione Emilia Romagna	2017	Linee di indirizzo regionali per la ristorazione dell'anziano in struttura residenziale	https://salute.regione.emilia-romagna.it/ssr/strumenti-e-informazioni/autorizzazione-e-accreditamento/servizi-sociosanitari-e-sociali/normativa-1/copy2_of_Allegato_96alimentazioneanziano.pdf/@@download/file/Allegato_96-alimentazione-anziano.pdf
Regione Friuli Venezia Giulia	2018	La ristorazione nelle residenze per anziani: linee guida della Regione Friuli Venezia Giulia	https://www.regione.fvg.it/rafvig/export/sites/default/RAFVG/salute-sociale/promozione-salute-prevenzione/allegati/06032018_linee_guida_ristorazione_anziani_26_febbraio.pdf
Regione Friuli Venezia Giulia	2015	Proposte Operative per la Ristorazione Assistenziale nelle Comunità per Anziani	https://asugi.sanita.fvg.it/export/sites/aas1/it/documenti/all_dip/mat_info/go_dip_ig_al_nutriz_proposte_operative_cdr.pdf
Regione Lazio	2017	Revisione e aggiornamento della Determinazione n. D2077 dell'11 giugno 2007. Qualità nutrizionale dei pasti forniti nella ristorazione collettiva. Procedure di verifica e modulistica.	http://www.sitinaZIONALE.org/bdsdocs/alimenti/normative/01determina.pdf
Regione Liguria	2022	Linee guida ristorazione ospedaliera assistenziale e scolastica	https://smart.comune.genova.it/sites/default/files/uploads/2022/Linee%20guida%20ristorazione%20ospedaliera%20assistenziale%20e%20scolastica%20Regione%20Liguria.pdf

Regione Lombardia	2009	Linee guida per la ristorazione ospedaliera	https://www.cremaonline.it/articoli/images/po19378_Alliegato_decreto_5250_2009.pdf
Regione Marche	2020	Indicazioni per la ristorazione nelle case di riposo	https://ww2.gazzettaamministrativa.it/opencms/export/sites/default/_gazzetta_amministrativa/amministrazione_trasparente/_marche/_azienda_pubblica_servizi_alla_persona_ASP_ambito_9_di_jesi/110_ban_gar_con/020_att_a_mm_agg_pro/2017/0004_Documenti_1486023910490/1486024944332_allegato_b_indicazioni_per_la_ristorazione_nelle_case_di_riposo.pdf
Regione Piemonte	2007a	Proposte operative per la ristorazione assistenziale	https://www.regione.piemonte.it/web/media/9465/download
Regione Piemonte	2007b	Proposte operative per la ristorazione ospedaliera	https://www.regione.piemonte.it/web/media/9467/download
Regione Piemonte	2011	Raccomandazioni elaborate a partire dai risultati del progetto “La ristorazione collettiva negli ospedali e nelle strutture assistenziali per anziani: sviluppo di buone pratiche”	https://www.slowfood.it/educazione/wp-content/uploads/2015/09/Raccomandazioni-ospedali.pdf
Regione Piemonte	2023	Proposte operative per la ristorazione ospedaliera e assistenziale della Regione Piemonte	https://www.regione.piemonte.it/web/sites/default/files/media/documenti/2024-07/proposte_operative_per_la_ristorazione_ospedaliera_e_assistenziale_in_piemonte_-_gennaio_2024_2.pdf
Regione Sardegna	2018	Linee guida regionali per la ristorazione collettiva	https://www.aslnuoro.it/documenti/3_212_20190108095002.pdf
Regione Toscana	2023	Linee di indirizzo regionali sulla ristorazione assistenziale	https://www.regione.toscana.it/documents/10180/183447780/SUPP+n.+279+al+BU+del+27.12.2023+pII.pdf/853f6200-dcac-dc01-646f-1243eca033e9?t=1703660678041
Regione Veneto	2021	Linee di indirizzo per la ristorazione nelle strutture residenziali extraospedaliere	https://sian.aulss9.veneto.it/mys/apridoc/iddoc/6007

SUBREGIONAL DOCUMENTS			
Institution	Year	Title	Link
ATS Insubria	2018	La gestione nutrizionale in RSA. Dalla malnutrizione alla ristorazione	https://www.ats-insubria.it/attachments/category/336/La%20Gestione%20Nutrizionale%20in%20RSA%20Dalla%20malnutrizione%20alla%20Ristorazione%20nuovo.pdf

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Azienda USL di Modena	2013	La cucina dei nonni. L'alimentazione sicura e gustosa nelle residenze per anziani di Modena e provincia	http://www.sabbatiniconsulting.com/DOCUMENTAZIONE/DOC1/20%20CASA/La%20cucina%20dei%20nonni.pdf
ATS Brianza	2019	Buon Appetito. Documento d'indirizzo sulla corretta alimentazione per l'anziano fragile in comunità	https://www.ats-brianza.it/images/IMMAGINI/Buon%20appetito%20RSA.pdf
ATS Pavia	2022	Linee guida per la ristorazione nelle residenze socioassistenziali. Struttura complessa igiene degli alimenti e della nutrizione	https://www.ats-pavia.it/documents/1795190/7440896/LINEE+GUIDA+PER+LA+RISTORAZIONE+NELLE+RESIDENZE+SOCIO+ASSISTENZIALI+-+2022.pdf/20c5519c-5b74-83d2-009a-7d54838a2476
SIAN di Trani	2020	Tabella dietetica RSA	https://www.sanita.puglia.it/documents/36008/105269914/Anziani_tabella+dietetica+Sian/82f03246-1203-40c1-a132-8c69afa2c86c