

Research

Persistence of folk dishes in the Coastal Cilento's Culinary Culture: an ethnogastronomic approach

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Abstract

Local gastronomy could be considered a relevant part of the more general concept of Traditional Knowledge, that recently has attracted increasing attention by researchers, especially if associated with conservation and sustainable use of biological resources. The present research was conducted using a semi-structured interview, 62 informants (39 women, 23 men) whose average age was 55 years (range 27–86 years) were interviewed. 109 traditional dishes are documented as still being prepared by people living along the Cilento coastal areas, 57 of which were reported by at least 5 people interviewed. The study reveals that despite the influence of globalization and modernization, traditional foodways and culinary practices continue to play an important role in the daily lives of the people in this region. Specifically, the study highlights the persistence of certain dishes, which are deeply rooted in the local culinary traditions and are still prepared and consumed by the people in this region.

Keywords Food culture · Food ways · Traditional food practices · Mediterranean diet · Ethnogastronomy

Abbreviation

EVOO Extra virgin olive oil

1 Introduction

The term "gastronomy" comes from the ancient Greek words "gaster" (meaning stomach) and "nomos" (meaning rules), and it was originally used to refer to the art or science of good eating [1]. In the fourth century BC, Archestratus an ancient Greek poet, wrote a poem on his long journeys in the Mediterranean region looking for the best food and finest wines; "*Gastronomia*" is one of the several putative titles to this book [2]. From a historical and etymological perspective, gastronomy concerns advice and indications on what to drink and eat, where, when, how, in which combinations. The origin of the term "gastronomy" thus includes an essential aspect of dietetics and norms, which has been overlooked in modern times, but is now recognized in contemporary usage. This aspect pertains to the ability to prepare food and

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create dishes in a particular way, as well as the acquisition of the skills and knowledge relative to eating and drinking which are implicit in the contemporary understanding [1]. Originally gastronomy was for the nobility, but over the time the concept has also come to include the peasant and poor people food typical of local and regional cuisine (Richards, 2003). Nowadays gastronomy has also become an interdisciplinary science that includes chemistry, botany, agronomy, anthropology, history, sociology, etc. Ethnogastronomy could be defined as the study of food and food heritage of an ethnic group, and can include the complex interactions between human societies, food, and their environment that Pieroni et al. [3] have defined “gastronomic ethnobiology”. Ethnogastronomy, through the study of the eating habits of traditional peoples and rural communities, helps to value their knowledge and justify the preservation of agro-biodiversity and natural resources [4].

The UNESCO placed gastronomy in the Representative List of the Intangible Cultural Heritage of Humanity in 2010, when the Intergovernmental Committee for the Safeguarding of Intangible Cultural Heritage accepted the application for inclusion of The Mediterranean Diet, The Traditional Mexican Cuisine, and The Gastronomic Meal of the French [5]

Therefore, local gastronomy could be considered a relevant part of the more general concept of Traditional Knowledge (TK). Recently, TK has attracted increasing attention by researchers, especially the TK associated with conservation and sustainable use of biological resources [6], but has been seldom applied to the local gastronomy.

Food tradition and local cuisine are characterized by a strong narration capable of involving both the emotional part and the interest in knowing about the history of a community [7]. Local food has undoubtedly become an important part of the cultural identity at community or regional scale. The concept of ethnic food culture encompasses not only food varieties, culinary techniques, and health benefits, but also cultural heritage, religious customs, and ways of living among people. Traditional foods, throughout history, have served as a means to pass down valuable knowledge [8]. As highlighted by Karaosmanoğlu [9] the local cuisine can play an active role as an agent of social change and a source of empowerment in the global market. In the last decades, traditional gastronomy has been considered as a suitable element to promote tourism and create business (e.g., [10, 11]). The intersection between food and travel has been identified as culinary tourism, which refers to practices of exploratory eating, where unfamiliar foodways is seen as a way of exploiting other places and cultures [12]. Production and consumption of food and wine have become a global phenomenon, and one of the most important trends is to link the consumption of food and wine to the place of origin because it is considered that one can fully enjoy or understand food and wine only if it is prepared in the territory by people from the local community with local and traditional ingredients, recipes, tools and procedures [13]. These processes can potentially devalue or distort the original context and significance of these foods, turning them into mere marketable goods rather than respecting their cultural, social, and economic importance for the communities that produce them. This can lead to issues like cultural appropriation, loss of authenticity, and exploitation of traditional knowledge and practices for commercial gain (see also [14, 15]).

Traditional cuisine is often linked to the use of local plant or animal food products. According to Jordana [16] in order to be traditional, a product must be linked to a territory, and it must also be part of a set of traditions, which will undeniably secure its ongoing persistence. In recent years, the growing interest in local food has been driven by strong convictions regarding its sustainability, ecological benefits, and health advantages [17]. Local wild food plants are incorporated into certain traditional recipes as well. As highlighted by Pieroni et al. [3] an expanding body of field studies has centered on gathering and consuming non-cultivated food plants. These studies aim to document Traditional Knowledge (TK) within anthropological and ethnobotanical contexts. They distinctly demonstrate that these locally sourced foods constitute a significant portion of traditional Mediterranean diets.

Cilento, situated in the southern Italian region of Campania, constitutes a rural area that forms a segment of the Cilento and Vallo di Diano National Park, founded in 1991. Scientists regard Cilento as the birthplace of the Mediterranean Diet due to its local cultivation of diverse fruits and vegetables forming the foundation of traditional cuisine. This is complemented by locally sourced wine, olive oil, and fish from the coastal villages [18]. Alongside Koroni in Greece, Soria in Spain, and Chefchaouen in Morocco, the Cilento and Vallo di Diano National Park is part of the sites recognized for the Mediterranean Diet. These sites were inscribed on the UNESCO Intangible Cultural Heritage list in 2013 [19]. This recognition should be understood as “the set of knowledge, expertise, and traditions that go from the environment to the table” [20]. Furthermore, in 1998, UNESCO designated Cilento as a World Heritage Site because of its archaeological sites, bearing evidence of human settlements dating to prehistoric eras. The coastal Cilento area is characterized by a rich culinary tradition that is deeply rooted in its history and geography. The regional cuisine is based on the use of local and seasonal ingredients, including fish, vegetables, and herbs thus managing to best express all land traits, which have always been associated with healthy living. The socio-economic conditions of the coastal Cilento area have also played a role in the persistence of folk dishes. This area, in fact, until the 50s of the last

century based its economy on fishing and farming, and only in the following decades becomes a popular tourism destination. Furthermore, Southern Italian people love to keep up with their traditions. This happens because most people in the south still cook every day and each Sunday, they spend from three to five hours eating traditional dishes at their parents' home even with their own families [21]. While there are numerous scientific studies exploring the health effects of the Cilento diet, particularly its impact on longevity (e.g. [18, 22]), alongside anthropological studies on the Mediterranean diet in Cilento (e.g. [21]), there is a noticeable absence in scientific literature regarding a systematic study on traditional dishes in Cilento cuisine and the continuity of their knowledge across multiple generations. Additionally, available books often list recipes without any analysis of the consumption of these dishes within the local population. A similar situation persists throughout the whole Southern Italy. However, an exception is noted in a paper discussing the Mediterranean Diet between traditional foods and human health in the Puglia region, where only six traditional recipes are documented [23].

Against this background, the aim of the present paper is to highlight the persistence of traditional local cuisine of people living in the coastal Cilento. The specific aims of this study were to:

- Gather and validate folk knowledge on local cuisine, emphasizing the persistence of specific traditional dishes unique to the study area;
- Investigate the ingredients and preparation techniques of these traditional dishes and to determine their alignment with the Mediterranean Diet.

2 Materials and methods

2.1 Study area

Fieldwork was carried out from June 2021 to September 2022 in the study area, which encompasses 12 municipalities situated along the coastal region of Cilento, within the province of Salerno (Fig. 1 and Table S1).

2.2 Sampling methods

For interviews, we initially chose local residents who served as key informants. Subsequently, utilizing a snowball-sampling method [24], we identified individuals with expertise in local cuisine, based on factors such as their age, profession,

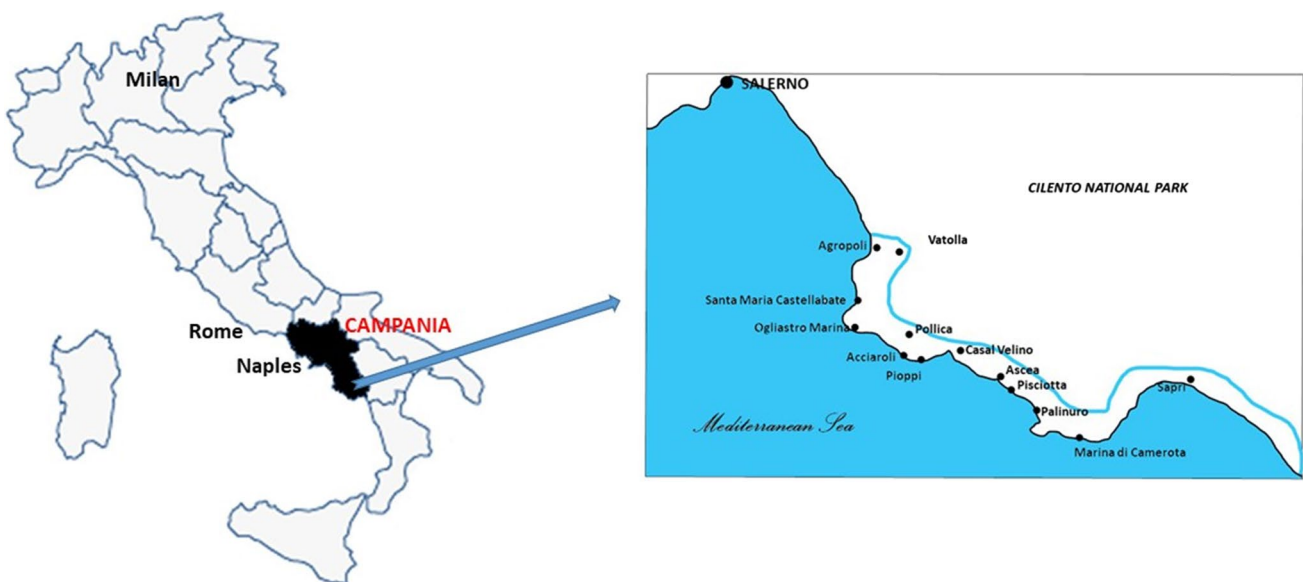


Fig. 1 Study area: geographic position of the coastal municipalities where the interviews were conducted

family heritage, or personal interests. In particular according to Etikan et al. [25] a linear snowball sampling method was employed, wherein one individual subject provided information about just one other subject. This chain continued linearly, with each subject referring to one other subject, extending until the end of the sampling process. The local collaborators who agreed to participate in our interviews were asked about the persistence of traditional recipes in family kitchens or restaurant menus pointing out only dishes eaten daily or in specific occasions (e.g. festivities).. We employed a qualitative anthropological method using a semi-structured questionnaire, accompanied by an in-depth conversation, when possible, to gather information on local names of recipes, ingredients and processing. In general, in the first part of the interview the interviewee was allowed to freely recall traditional recipes, in the second part specific recipes were requested from a previously prepared list, based on bibliographic research or previous interviews. Re-visits were also done when required. The gender, age, and any additional background details of all the local collaborators were documented. We interviewed 62 local collaborators (39 women, 23 men) whose average age was 55 years (range 86–27 years). Most of the local collaborators (42%) belonged to the upper age class (60–86), while 34% of interviewees were between 27 and 40 years old. We set up a database including dish vernacular name, category, ingredients, preparation and mentions.

2.3 Statistical analysis

To support our analysis, we performed Multiple Correspondence Analysis (ACM), one of the most widely used statistical techniques for the "multiple" analysis of quantitative or mixed data collected through questionnaires. The primary goal of ACM is to examine the relationships among a set of qualitative variables observed in a statistical sample of units. We created a table in which each participant is associated with an identifier (ID), age, gender, location, and each dish is assigned a value of 1 if the respondent adheres to the tradition of that dish, otherwise 0.

3 Results and discussion

Based on the interviews, 109 traditional dishes are documented as being still prepared by people living along the coastal areas of Cilento. Some of the 57 dishes that were reported by at least 5 interviewed people (Table 1) will be analyzed and discussed below.

First courses, second courses and desserts are the most reported categories, both with 12 entries. Side dishes and single dishes are also quite popular, with 9 entries respectively (Fig. 2).

Vegetables-based dishes amount to 59% and can be further classified as containing vegetables but also ingredients of animal origin, (i.e., milk, dairy products, or eggs (37%) or without ingredients of animal origin (22%). The dishes containing meat account for 22% of the total, with pork being the most common (also in the form of bacon, salami, or ham), while beef or other meats are present in only a few recipes. Fish-based dishes (15%) consist almost exclusively of anchovies, usually fresh or occasionally preserved in salt.

Cheese and legumes (Fig. 3) are the ingredients mainly used in the preparation of traditional dishes (32% each) followed by bread (27%), meat and eggs (20 each).

The results of our analysis (Fig. 4), show that there is a persistence of traditional Cilento recipes across generations, with no significant losses related to age and gender. This suggests that traditional recipes have been successfully transmitted from one generation to another, involving both men and women of various ages. This cross-generational and gender inclusivity can be interpreted as a sign of cohesion within the community, where a passion for traditional cuisine is shared and passed down through different generations and genders.

The cluster analysis (Fig. 5) reveals that in certain locations, the persistence of gastronomic tradition is more pronounced. In the areas of Vatolla and Santa Maria di Castellabate (and Policastro and Pisciotta), represented by the purple cluster, there is a strong adherence to the tradition of specific dishes: *Minestra sfrigata*, *Carciofi ammollicati*, *Sfriunzolo di maiale*, *Baccalà alla cilentana*, *Ravioli alla cilentana*, *Pizza cilentana*, *A pastina*, *Vicci cilentani*, *Pasticelle*, *Ciccimaretati* and *Ciauredda*. In the area of Agropoli, represented by the blue cluster, there is a strong persistence of folk dishes in the Coastal Cilento's Culinary Culture, particularly for some dishes: *Lattuga e fave*, *Tiella cilentana*, *Polpette di pane*, *Braciola alla cilentana*, *Cavatelli* or *fusilli con ragù cilentano* and *Rose di Carnevale*. The locations in the red cluster, for example Casalvelino, Perdifumo, Pollica, Sapri e Marina di Camerota, are characterized by persistence for various dishes: *Pizza*

Table 1 Traditional recipes with at least 5 mentions taken from a total of 109 traditional dishes collected in the interviews (M = mentions)

Dish vernacular name	Category	Ingredients	Preparation	Variants	M
A pastina	Sweet	Ricotta, eggs, milk, wheat, sugar, candied fruit, melon seed-shaped pasta	The ingredients are mixed and then cooked in the oven		7
Acqua cecata (pancuotto)	Soup	Cherry tomatoes, onion, garlic, basil, oregano, salted anchovies, stale bread, EVOO, salt, pepper, water	The ingredients are first fried in oil, then cooked in water and poured hot on the bread with basil and oregano		9
Acquasale	Starter	Frisella, tomatoes, EVOO, oregano, salt	The friselle are dipped in water for a few moments and then seasoned with the rest of the ingredients	If added with goat cheese and olives, it is served as a main dish	30
Alici 'mbuttunate ('nchiappate)	Second course	Deboned anchovies, pecorino o caprino cheese, bread crumbs, eggs, parsley, garlic, EVOO	The anchovies are stuffed with all the ingredients, dipped in flour and fried in oil	The anchovies are sometimes seasoned with tomato sauce or served with toasted bread	38
Alici ammollicate	Second course	Deboned anchovies, minced bread crumb, parsley, lemon juice, EVOO	The opened anchovies are put in a baking sheet, sprinkled with chopped bread, parsley and garlic, seasoned with oil and lemon juice and cooked in the oven	Garlic and/or capers are also added	23
Alici arreganate	Second course	Deboned anchovies, oregano, parsley, garlic, chili pepper, EVOO, vinegar	The anchovies are arranged in layers in a shallow pan, seasoned with oregano, parsley, garlic, chili pepper, EVOO and salt, and cooked on low heat. Finally are sprinkled with vinegar		23
Asparagi (or fave) a susciello	Second course	Asparagus (or broad beans), eggs, goat cheese, parsley, chili pepper, EVOO, water, salt, stale or toasted bread	The asparagus (or broad beans) are fried in oil with chili, then water or vegetable broth is added. When the liquid boils, the beaten eggs are added with parsley and grated cheese. It is served on slices of toasted bread		29
Baccalà alla cilentana	Second course	Cod, potatoes, black olives, tomato puree, parsley, garlic, Vatolla onion, EVOO, pepper	Cod, potatoes, black olives and spices are cooked in the tomato sauce		16
Braciola alla cilentana	Second course	Pork or veal meat (muscle), tomato puree, onion, garlic, parsley, goat cheese, salted lard fillets, chili pepper	The meat is cut into pockets and stuffed with all the ingredients, then cooked in tomato sauce		9
Bruschette ai fichi cilentani	Starter	Cilento homemade bread, Cilento white figs (fresh and ripe), raw ham, fresh goat cheese, honey, EVOO, parsley, pepper	The ingredients are placed on the toasted bread and seasoned with EVOO		6
Camoscia	Single dish	Flour, yeast, water, mixed vegetables	Pizza stuffed with vegetables	Salami is sometimes added	5

Table 1 (continued)

Dish vernacular name	Category	Ingredients	Preparation	Variants	M
Cannoli del Cilento	Sweet	Dough: flour, eggs, sugar, EVOO, sparkling wine. Stuffing: egg yolks, flour, milk, vanilla, chocolate	The cannoli are fried and then filled half with yellow cream and half with chocolate cream and sprinkled with icing sugar	Sometimes sprinkled with anise liqueur or a regional liquor called "Strega"	30
Carciofi ammollicati	Side dish	Artichokes, grated bread, grated pecorino cheese, EVOO, parsley, garlic, salt, water (tomato puree)	The artichokes are stuffed with oil, bread, pecorino cheese, parsley and garlic and then stewed in oil and water	Someone adds eggs and/or onion in the stuffing. Sometimes are served with tomato sauce	12
Castagnole	Sweet	Flour, eggs, sugar, EVOO, grated lemon peel, lemon liquor	The dough is made with all ingredients. Small balls filled with chestnut or chocolate cream are formed and fried		11
Caurato	Soup	Fresh anchovies (or sardines), salted anchovies filets, onions, garlic, potatoes, chicory, broad beans, wild fennel leaves, EVOO, salt	Garlic, onions, vegetables and anchovy filets are fried in oil, then water and the fresh anchovy filets are added		11
Cavatelli e fagioli	First course	Beans, celery, peeled tomatoes, garlic, EVOO	Beans and celery are boiled, then drained and added to the tomato sauce. Cavatelli are seasoned with these ingredients		5
Cavatelli o fusilli con ragu cilentano	First course	Pork, tomato puree, garlic, onion, chili pepper, EVOO, salt, goat caciocotta	Cavatelli are seasoned with the ragout made with pork meal and spices. The caciocotta is grated on the pasta		26
Cazuncielli di ieta	Single dish	Cazuncielli: Semolina, yeast, water. Filling: Wild chard, meniaca anchovies, garlic, EVOO	Cazuncielli are filled with chard and anchovies and fried in EVOO and garlic		5
Ciambinotto	Starter	Anchovies, garlic, chili pepper, EVOO, salt	The anchovies without the head and bones are marinated in oil and spices in the refrigerator for at least 5 h		6
Ciambotta (o caponata cilentana)	Side dish	Potatoes, peppers, aubergines, cherry tomatoes, garlic, basil, EVOO, salt	Aubergines, potatoes, peppers and tomatoes are cooked together. All the ingredients are mixed and add a lot of basil is added		31
Ciaureda	Side dish	Cherry tomatoes, peppers, aubergines, basil, EVOO, salt	Aubergines, potatoes, peppers and tomatoes are fried separately. All the ingredients are mixed and add a lot of basil is added		7
Ciccimaretati (Ciccata)	Soup	Broad beans, grass peas, beans, peas, chickpeas, lentils, wheat, maize, barley, garlic, EVOO, parsley, salt	The ingredients are cooked in plenty of water, in the following order: maize, wheat, barley, chickpeas, broad beans, peas, beans, lentils. When cooked, the soup is seasoned with a condiment of garlic, oil and parsley		26

Table 1 (continued)

Dish vernacular name	Category	Ingredients	Preparation	Variants	M
Fave alla cilentana	Side dish	Spring onions, bacon, parsley, wild fennel leaves	Spring onions and bacon are fried in a pan. Then the broad beans, the fennel and half of the parsley are added with two glasses of water. When cooked the dish is seasoned with parsley, salt, pepper and lemon juice and served on fried slices of bread		5
Fianchetto al ragù	Second course	Pork or veal (flank steak), tomato puree, onion, garlic, parsley, grated goat cheese, salted lard fillets, chili pepper	The meat is stuffed with pieces of lard, garlic, parsley, grated cheese and sewn together to prevent the stuffing from coming out during cooking. Cooked in tomato sauce with onions		12
Fianchetto in brodo	Second course	Pork or veal (flank steak), eggs, caciocotta, garlic, parsley	The flank steak is stuffed with eggs, goat cheese, garlic and parsley and sewn to prevent the stuffing from coming out during cooking. Cooked in vegetable broth		5
Fichi impaccati	Sweet	Dried white Cilento figs, almonds (walnuts), lemon peel, wild fennel seeds, bay leaves	The figs are cut in half, stuffed with the ingredients, then threaded onto a broom stick and left to dry in the sun		9
Foglie e patane (Mallone)	Side dish	Sow thistles, turnips, borage, nettles, dandelions (or other wild food plants), potatoes, garlic, chili, EVOO, salt	The vegetables are boiled and then fried with oil, garlic and chili pepper. Potatoes are mashed with a fork during cooking		34
Fusilli al sugo di castrato (alla cilentana)	First course	Tomato puree, pork, veal, mutton, egg, caciocotta or Cilento goat's cheese, EVOO oil, garlic, chili pepper, basil	A ragout with all the ingredients is made. Then fusilli are seasoned with the sauce. The meat is eaten as a second course		8
Fusilli con le melanzane	First course	Tomato puree, aubergines, onion, EVOO, caciocotta cheese, basil	The aubergines are cut into strips and fried in EVOO the added to a tomato sauce. Fusilli are seasoned with the sauce and sprinkled with grated caciocotta		22
Grano al forno	Single dish	Boiled wheat, eggs, mozzarella and/or smoked provola cheese, grated caciocotta, grated parmesan, salami and/or ham, butter, pepper	All the ingredients are put in a baking dish, sprinkled with breadcrumbs and butter flakes, then cooked in the oven		5
Lagane e ceci	First course	Chickpeas, EVOO, salt, garlic, chili pepper, parsley	Chickpeas are cooked in the water. Fried in a pan garlic with chili pepper, then lagane and chickpeas are added. Chopped parsley is sprinkled on the dish		28

Table 1 (continued)

Dish vernacular name	Category	Ingredients	Preparation	Variants	M
Lattuga e fave	Soup	Lettuce, broad beans, wild fennel leaves, bacon	the ingredients are put in a pan to simmer with a little water		5
Maracucciata	Single dish	Wheat and maracuoccio flours, onions, EVOO, chili, salt. Croutons of bread	In a saucepan the flours are boiled in the water until is cooked Separately, the finely chopped onion and the croutons are fried with the addition of chili. Put together maracucciata and croutons		6
Mbrugliateddi, mugnatièddi	Second course	Offal and large omentum of kid (retina), pepper, cheese, garlic, parsley	First, the entrails are opened using scissors and then washed in hot water with lemon and salt. Next, a piece of retina is laid out and filled with a combination of large intestine, cheese, garlic, and parsley. The mixture is then rolled into a cylinder shape, using a piece of small intestine as the wrapping. Finally, the roll is fried alongside pieces of kid's liver and lung		9
Melanzane ammolliccate	Side dish	Aubergines, breadcrumbs, parsley, garlic	Aubergines are fried and a mixture of the other ingredients is added		17
Melanzane mbuttunate (Sciambelle)	Single dish	Aubergines, cherry tomatoes, eggs, bread crumbs, caciocotta, salt, EVOO, basil, garlic, parsley	Filling: mix eggs, breadcrumbs, parsley, finely minced garlic and caciocotta cheese. The aubergines are cut into discs and stuffed in pairs with the filling and fried. Then topped with a garlic flavored tomato sauce		34
Minestra maritata	Soup	Beef cheek, pork tacks, ham bone, lard, cabbage, escarole, chicory, borage, potatoes, celery, onion	The meat is cooked in water with celery and onion. Separately, vegetables are blanched in hot salted water and then added to the meat broth. Served on toasted slices of bread		10
Minestra sfritta (strinta, o terrana)	Side dish	Wild leafy food plants (e.g. sow thistles, chicory, wild fennel, chard, potatoes, garlic, chili, EVOO, water, salt	The vegetables are boiled, then squeezed in a cotton towel and finally fried with oil, garlic and chili pepper		12
Morselletti	Sweet	Flour, sugar, butter or lard, eggs, ammonia for cakes, milk	The dough obtained by mixing all the ingredients is formed into a loaf, brushed with the beaten egg yolk and bake. Then cut into pieces and baked again		5
Nocche	Sweet	Flour, eggs	The dough is cutted into stripes and fried in EVOO		7

Table 1 (continued)

Dish vernacular name	Category	Ingredients	Preparation	Variants	M
Rose di carnevale	Sweet	For the dough: Flour, egg yolks, sugar, sweet wine, salt, EVOO	Two thin discs of dough, cut in four parts leaving the center entire are fried overlapping in plenty of extra virgin olive oil. So a rose-shaped cake is obtained. The rose is filled with custard and decorated with a candied cherry in the center and ice sugar		14
Pasticelle, (mbuttetelle, lucernelle, pastorelle)	Sweet	Dough: flour, eggs, sugar, salt, baking powder, EVOO, sparkling wine. Cinnamon, cloves, icing sugar, rosemary. Filling: custard/chestnut cream/ chopped almonds	The dough is rolled out into a thin sheet and two discs are cut out, the filling is placed in the center of one of these and covered with the other disc. With a knife, make four cuts about 2 cm wide on the edge of the pastry and the edges folded towards the center. The discs are fried in olive oil, then brushed with honey by adding a pinch of cinnamon and finely chopped cloves, icing sugar and a sprig of rosemary	Pistachios, pine nuts, hazelnuts, chocolate, coffee, raisins, mandarin peel can be added	13
Pastiera con riso	Sweet	Shortcrust pastry: flour, butter, sugar, eggs, grated lemon peel. Filling: milk, boiled rice, grated lemon peel, salt, sugar, butter, ricotta cheese, diced candied fruit, eggs	The shortcrust pastry is rolled out and used to line a pie dish, then filled. The Pastiera is baked in the oven		11
Patate arreganate	Side dish	potatoes, onions, oregano, EVOO	Potatoes cut into large wedges placed in a saucepan with onions cut into rings, oregano and EVOO, water is added and then cooked		5
Pizza chiena	Single dish	Dough: flour, EVOO, lard, water, salt. Filling: fresh goat caciocotta, grated seasoned goat caciocotta, eggs, hard-boiled eggs, salame, parsley, salt and pepper	The dough is rolled out and used to line a baking sheet, then filled and covered with a disk of dough. Cooked in the oven		23
Pizza cilentana	Single dish	Pizza dough: water, flour, yeast, salt. Dressing: tomato, garlic, goat cheese	The dough is rolled out and used to line a baking tray and topped with tomato sauce previously cooked in a pan with garlic sautéed in EVOO. Then sprinkled with grated cheese	Someone season with oregano and/or olives or salted anchovies	24
Pizza con l'evra	Single dish	Pizza dough: water, flour, yeast, salt. Dressing: wild herbs, olive, anchovies, capers, onion	The dough is rolled out and then filled with the boiled herbs and the other ingredients. Cooked in the oven		6

Table 1 (continued)

Dish vernacular name	Category	Ingredients	Preparation	Variants	M
Pizza roce (Torta col Naspro)	Sweet	Dough: flour, eggs, sugar. Filling: Milk, sugar, eggs, flour, chocolate, grated lemon peel. Icing: water, sugar, lemon juice	The dough is whipped and then baked in the oven. Once it has cooled, it is filled with cream. Finally, the cake is covered with icing		14
Polpette di Carnevale	Second course	Potatoes, grated goat cheese, eggs, bread, parsley, pepper, salt, EVOO	Potatoes boiled and mashed to which the other ingredients are added forming balls which are fried in EVOO		22
Polpette di pane	Second course	Eggs, bread crumbs, caciocotta, salt, EVOO, basil, garlic, parsley, tomato	Balls are formed with the ingredients, and fried in EVOO. Then cooked in a tomato sauce	Anchovies are sometimes added	14
Ravioli alla cilentana	First course	For the ravioli: flour, eggs. Stuffing: Cilento buffalo ricotta, minced meat, Cilento red wine, Vatolla onion, carrot, celery, basil, salt, pepper, Condiment: garlic, tomato puree, EVOO, caciocotta	The ravioli are filled and then cooked in boiling water. Afterwards, they are seasoned with tomato sauce and grated caciocotta		6
Scarole mbuttunate	Single dish	Escarole. Filling: egg, grated goat cheese, breadcrumbs, garlic, olive, parsley	The filling ingredients should be mixed. The escarole should be spread out and the filling placed in the center. Then, the escarole should be closed and tied with a string. Next, the escarole should be placed in a pan with water, oil, and salt and cooked		7
Scauratielli, scauratieddi	Sweet	Dough: water, flour, orange and lemon peel, sugar, salt, white wine, EVOO, rosemary, honey	The water should be boiled for a few minutes with orange or mandarin, lemon, wine, oil, sugar, salt, and rosemary. The lemon, orange, and rosemary are removed from the water, and the flour should be added all at once. The mixture is cooked until the dough no longer sticks to the sides of the pot. The resulting mixture is placed on a surface and flattened with a rolling pin. After allowing it to cool, it should be cut into alpha or beta shapes and fried in oil. The fritters are arranged on a serving dish and seasoned with honey and sugar		17

Table 1 (continued)

Dish vernacular name	Category	Ingredients	Preparation	Variants	M
Scialatielli alla cilentana	First course	Scialatielli. Dressing: dried tomatoes in oil, capers, anchovies in oil, parsley, tomato puree, garlic, breadcrumbs, EVOO, salt	Garlic, anchovy fillets, capers, sun-dried tomatoes, tomato puree, and tablespoons of extra virgin olive oil are blended together in a cutter. Scialatielli are cooked separately, and then added to the sauce. Finally, the breadcrumbs and chopped parsley are added		6
Sfriunzolo di maiale	Second course	Pork cheek (papacelle), white wine, pepper, EVOO, salt	To reduce the vinegar smell, the peppers should be washed thoroughly. Then, they should be cut into pieces and dried. Next, the meat should be cut into chunks and placed into a pan with plenty of hot oil over low heat, allowing it to brown. After that, the meat should be deglazed with wine. Finally, the peppers should be added and the dish should be finished cooking		15
Tiella cilentana	Side dish	Potatoes, onions, cherry tomatoes, breadcrumbs, EVOO, pepper, basil, oregano, salt	The ingredients are placed in a baking dish. The dish is covered with aluminum foil and baked in the oven		10
Vicci cilentani (Zeppole)	Sweet	Soft wheat flour, potatoes, eggs, butter, limoncello liqueur, brewer's yeast, milk, grated lemon peel, salt, sugar	The potatoes are boiled, peeled and mashed then added to milk and yeast. The dough should be formed into balls and left to rise for 2 h. Small wheels with holes in the center are formed which are fried in oil and sprinkled with sugar while they are still hot		9

Fig. 2 Dish categories

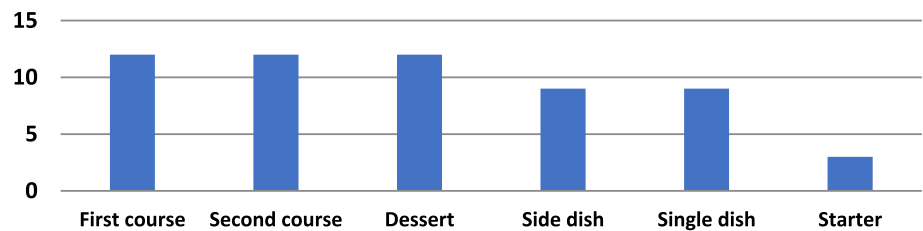
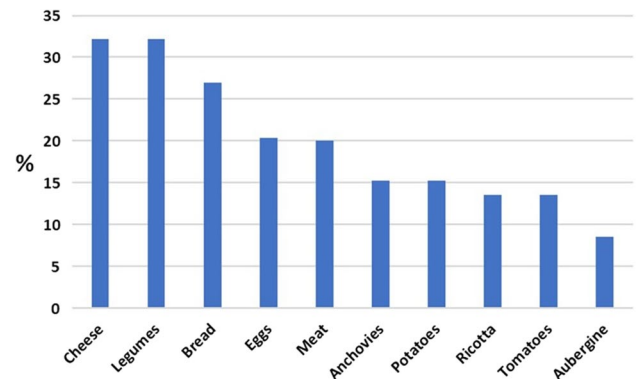


Fig. 3 Ingredients mainly used in the preparation of traditional dishes



con l'evra, Cazuncielli di ieta, Fusilli con melanzane e Camoscia. In the last cluster, the green one, there are all the locations where culinary tradition is less persistent, for example, Ogliastro and Acciaroli.

3.1 Main traditional dishes: ingredients and description

3.1.1 Cheese-based dishes

The dairy tradition of coastal Cilento is mainly linked to goat and sheep's milk. "Cacioricotta" (Fig. 6a) is undoubtedly the most used cheese in the local traditional cuisine and is obtained by a double process (rennet and thermal coagulation) from goat's milk. It is eaten fresh, seasoned as grated cheese, or used as filling in many meats, fish, or vegetable dishes. "Cacioricotta" is protected under the Slow Food Presidia program, which aims to safeguard traditional food products and support local food communities.

Fresh "Ricotta" cheese is a type of fresh cheese made from the whey left from the production of other cheeses (Fig. 6b). The whey protein coagulation process takes place by heating the whey to a temperature of 80–90 °C. The curd is then separated from the whey, drained, and pressed into a soft, creamy cheese with a slightly grainy texture. Because it is made from whey, ricotta is a relatively low-fat cheese compared to other types of cheese. This cheese is also made from buffalo milk as a by-product of mozzarella.

Ricotta is a basic ingredient of some sweets such as *A pastina*, and *Pastiera*, or as filling for *Ravioli*.

3.1.2 Bread-based dishes

Because of poverty conditions that characterized the study area until the mid-twentieth century, food resources were always optimized, and nothing was wasted or lost. Bread was baked about once a month and at the end of its storage cycle, it was reused in the preparation of many dishes. One way of preserving or reusing the bread was a second baking to prepare a type of biscuit, locally called "friselle" or "biscotto", depending on the specific shape, flat in the case of frisella and chunky in the case of biscotto (Fig. 7).

"Friselle" or "biscotto" are the basis for the *Acquasale* wich is one of the most reported recipes in our research. Its ingredients are very simple: a frisella/biscotto moistened with water and then seasoned with tomatoes, oregano (and/or basil), EVOO and salt. Originally the dish was prepared by the fishermen on board and the "frisella" was soaked in sea water.

Bread is also the basis of a dish called *Acqua cecata*, whose ingredients (tomatoes, onion, garlic, salted anchovies, and stale bread) are first fried in oil, then boiling water is added and left to cook for a few minutes. This mixture is poured over

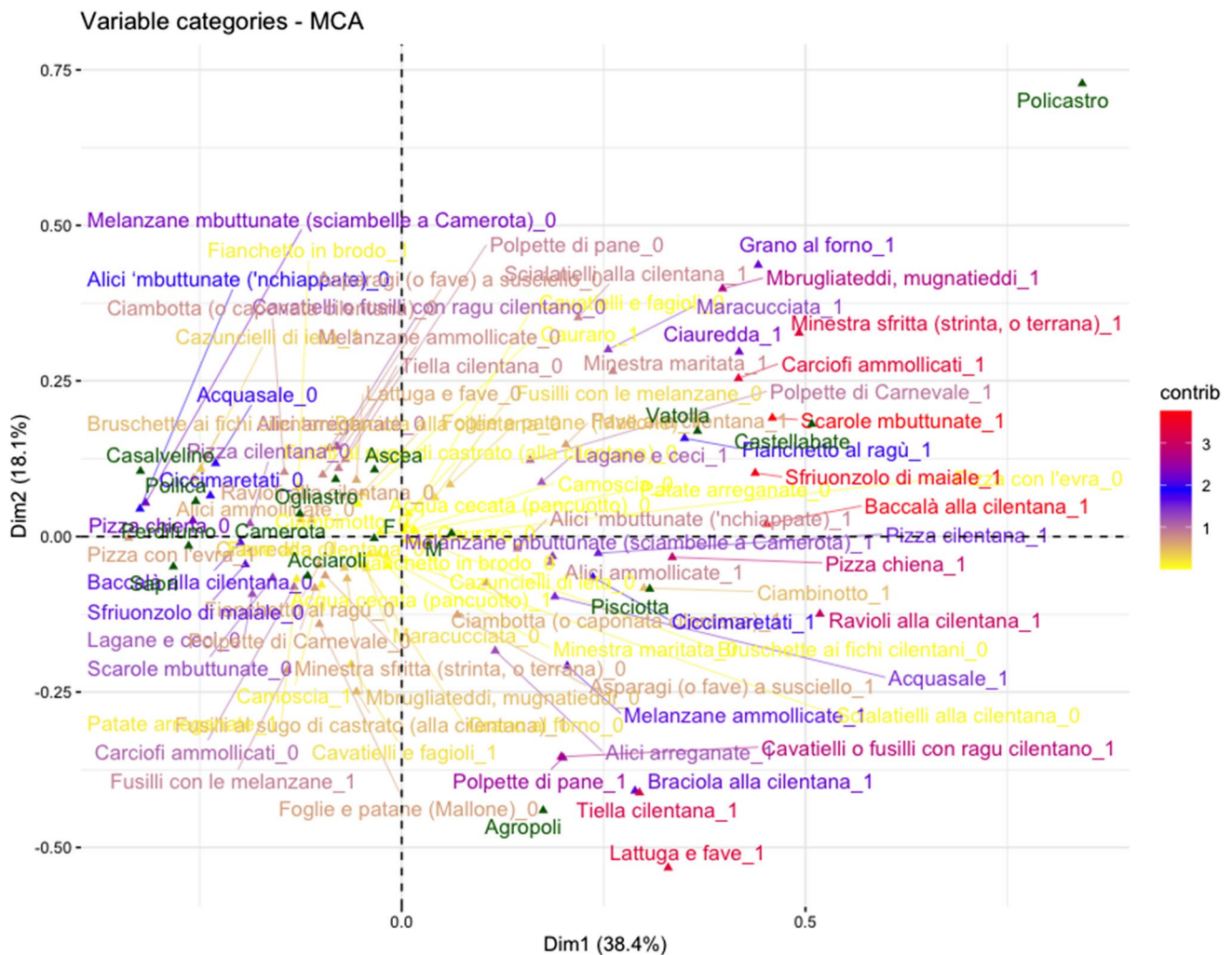


Fig. 4 Factor map representation of different dishes based on locations, gender and age: identifier 1 indicates that the respondent mentioned the dish, 0 otherwise

the slices of stale bread. The name *Acqua cecata* (lit. blind water) derives from the fact that when boiling water is added to oil, hot splashes are generated that are potentially dangerous for the eyes.

Polpette di pane are balls made with eggs, breadcrumbs, ascioricotta, salt, basil, garlic, and parsley fried in EVOO and then cooked in a tomato sauce.

Stale bread was minced or toasted and then grated and is a key ingredient in many local recipes. All the recipes in which the vernacular name “ammollicato” or “mbuttunato” appears refer to vegetable or fish-based products that are stuffed or covered with chopped or grated stale bread.

3.1.3 Fish-based dishes

Although the Cilento sea is particularly fishy, traditional recipes report the sole use of anchovies as fresh fish. In particular, the so-called “Menaica anchovies” are used. The name “Menaica” derives from the local fishing technique which involves the use of special nets called “menaide”. “Menaica anchovies” are highly appreciated for their delicate and sweet flavor and firm texture. They are eaten fresh or salted, raw or cooked. These anchovies are considered a delicacy and are protected under the Slow Food Presidia program. In addition to being an ingredient in some stuffing, anchovies are basic dishes of local cuisine such as: *Alici mbuttunata* in which the anchovies are stuffed with goat cheese, bread crumbs, eggs, parsley, garlic, dipped in flour and then fried. Sometimes tomato sauce is added (Fig. 8a); *Alici ammollicate*, in which the opened anchovies are put in a baking sheet, sprinkled with chopped bread, garlic, and oil, baked at a temperature of 150 °C (302

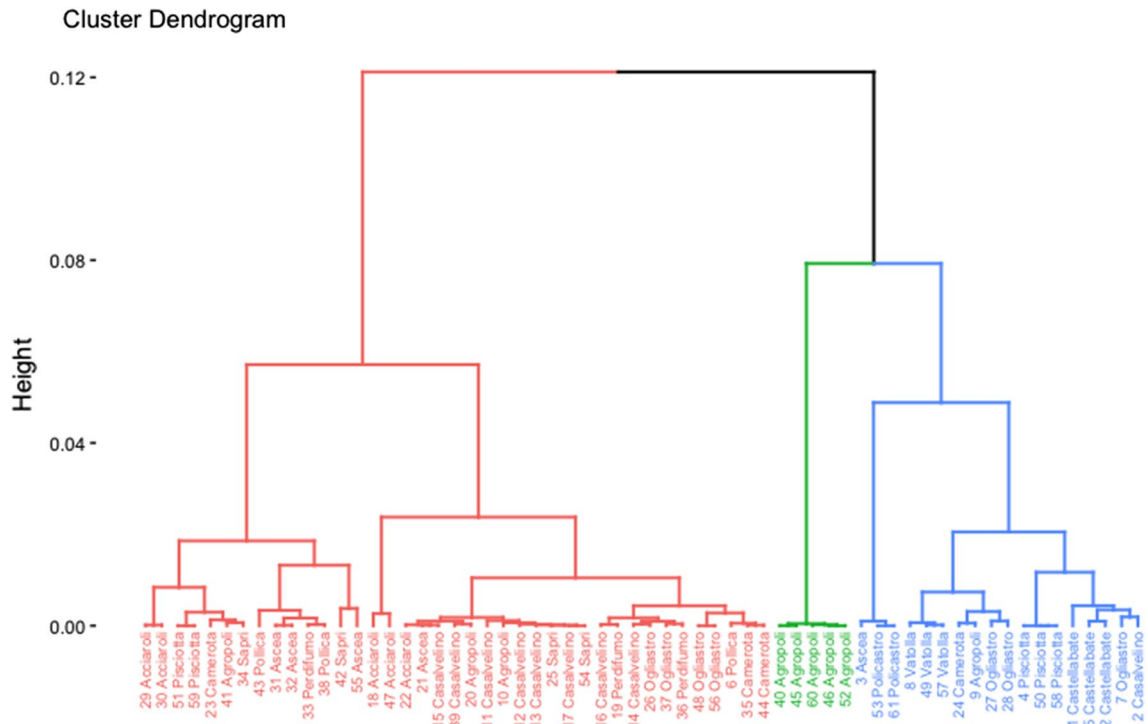


Fig. 5 Dendrogram: cluster analysis to determine characterizations of different locations

Fig. 6 Seasoned Cacioricotta (a); Ricotta (b)

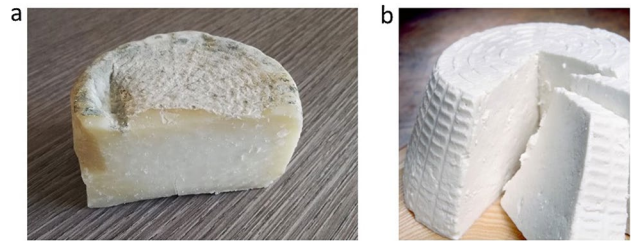


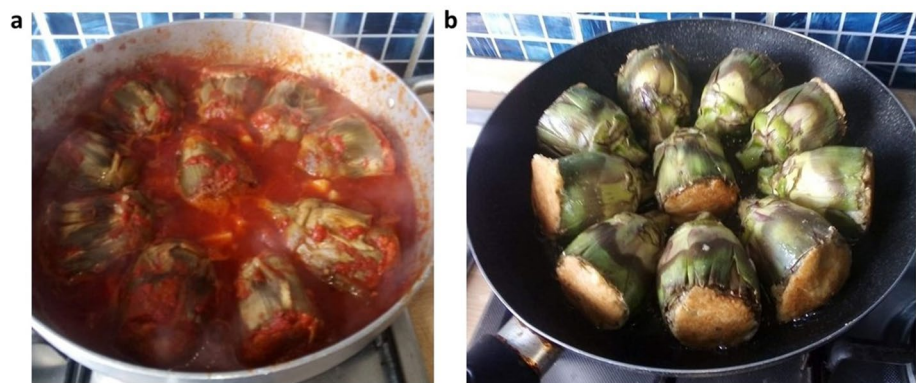
Fig. 7 Preparation of bread to make "Biscotto" (a, b); Biscotto (c); Frisella (d)



Fig. 8 Anchovies-based dishes: *Alici mbuttunata* (a); *Alici ammollicate* (b); *Alici arreganate* (c); *Cauraro* (d)



Fig. 9 *Carciofi ammollicati* with (a) and without (b) tomato sauce



°F) and then seasoned with lemon juice and parsley (Fig. 8b); *Alici arreganate*, in which anchovies are arranged in layers in a shallow pan, seasoned with oregano, parsley, garlic, chili pepper, EVOO and salt, and cooked on low heat. Finally, are sprinkled with vinegar (Fig. 8c). *Cauraro* is a typical dish of the Cilento coast in which garlic, onions, vegetables (chicory, broad beans, wild fennel leaves) and salted anchovy fillets are fried in oil, then boiling water and the fresh anchovy (or sardines) are added and left to cook for a few minutes (Fig. 8d).

Baccalà alla cilentana is a cod-based dish that is cooked with spices and black olives in a tomato sauce. Potatoes are sometimes added. In the past it was mainly prepared by the inhabitants of the internal Cilento villages, who preferred cod to fresh fish because it was easier to store and transport.

3.1.4 Vegetable-based dishes

Vegetables are the totality of the ingredients or a significant part in many dishes of the traditional cuisine of the coastal Cilento. The vegetables used are generally those grown in the family garden.

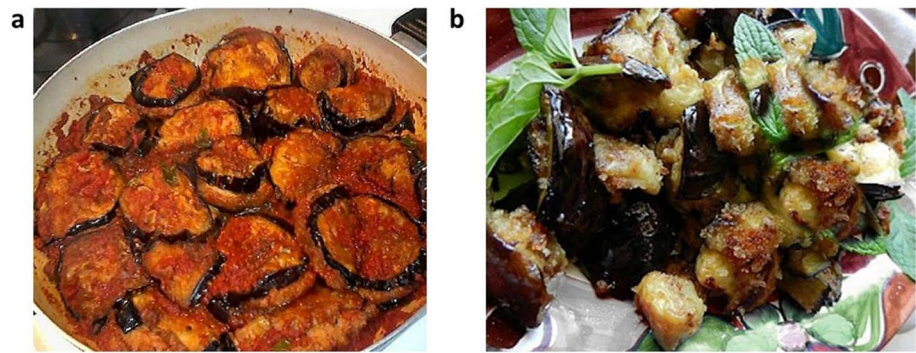
Carciofi ammollicati is a dish based on artichokes stuffed with oil, grated bread, grated pecorino cheese, parsley and garlic and then stewed in oil and water. Tomato sauce is sometimes added (Fig. 9).

Ciambotta is a mixture of all the vegetables found in the summer garden. It is usually based on aubergines, potatoes, peppers and tomatoes which are cooked together with final addition of abundant basil.

Melanzane'mbuttunata and *ammollicate* are two aubergines-based dishes (Fig. 10). In the first aubergines are cut into slices and stuffed in pairs with a filling of eggs, bread crumbs and caciocotta, then fried in EVOO and topped with a garlic flavored tomato sauce. The second one is a very simple preparation based on fried aubergines, to which breadcrumbs, parsley and garlic are added.

Polpette di Carnevale are balls made with boiled and mashed potatoes, grated goat cheese, eggs, stale bread, parsley, and pepper, then fried in EVOO. This is a typical dish of Carnival Day. *Susciello* is a typical dish of the Cilento area. It consists

Fig. 10 *Melanzane mbuttunata* (a); *Melanzane ammollicata* (b)



of vegetables (asparagus or broad beans) fried in EVOO with chili peppers to which broth and beaten eggs are added with parsley and grated cheese. It is served on toasted bread slices. *Tiella cilentana* is an ancient poor dish of Cilento that derives from peasant culture. It is a mixture of potatoes, onions, tomatoes, breadcrumbs, EVOO, pepper, basil, oregano, cooked in oven in a baking dish at a temperature of 180 °C (356 °F) for about 40 min.

Also, wild food plants play an important role in the traditional cuisine of coastal Cilento and some recipes are based on species gathered in the fields. Wild food plants are classified as functional foods, being consumed not only for their nutritional value but also for their positive impact on health. [26, 27].

Foglie e patane, for example, is a very simple preparation based on mashed potatoes stir fried together with boiled wild leafy plants, such as sow thistles (*Sonchus* spp.), turnips (*Brassica* spp.), borage (*Borago officinalis*), nettles (*Urtica* spp.), or other wild food plants depending on the season. Garlic and chili pepper are often added. *Minestra sfritta* (or *Minestra strinta* or *terrana*) is a similar preparation obtained boiling wild food plants which are then squeezed (hence the term *strinta*) and fried in oil with garlic and chili pepper.

3.1.5 Legume-based dishes

Different types of legumes are used in the traditional local cuisine such as broad beans, beans, peas, chickpeas, and lentils. All these legumes, together with wheat, maize, barley, and garlic, are the ingredients of a soup called *Ciccata* (or *Ciccimaretati*) (Fig. 11a). *Fave alla cilentana* is a side dish whose ingredients are broad beans, bacon, spring onions, bread, EVOO, lemon juice, parsley, pepper, wild fennel (Fig. 11b).

A typical local legume is the so-called “Cicerale chickpea”, cultivated in the eponymous locality in northern coastal Cilento. The name Cicerale derives from the Medieval Latin: “terra quae cicera alit” (lit. land that feeds chickpeas). In fact, the town’s coat of arms depicts a chickpea plant intertwined with a grass, probably wheat (Fig. 12). The “Cicerale chickpea” is grown according to the criteria of organic farming, is not irrigated and is protected under the Slow Food Presidia program. “Cicerale chickpea” is also the main ingredient of the *Lagane e ceci* (see Pasta paragraph).

Maracucciata is a traditional dish that has for a long time provided food for the poorest families in the village of Camerota. The local term “Maracuoccio”, which derives from the words *mar*, which means bitter, and *cuoccio*, which means a pod, refers to a small bitter legume grown in the area around the village of Lentiscola, that could be referred to the species *Lathyrus cicera*. The seeds are milled into a flour at local mills. This legume is also protected under the Slow Food

Fig. 11 *Ciccata* (a); *Fave alla cilentana* (b)

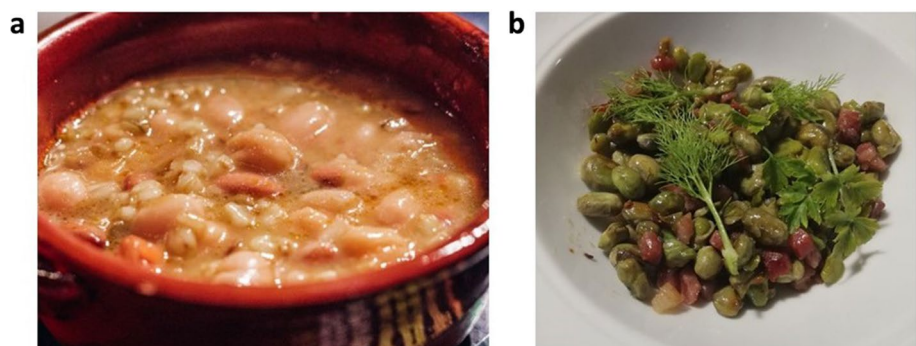


Fig. 12 Cicerale's coat of arms



Presidia program. *Maracucciata* is a kind of polenta made with half "Maracuoccio" flour and half wheat flour, seasoned with EVOO, onions, garlic and chili and served on croutons.

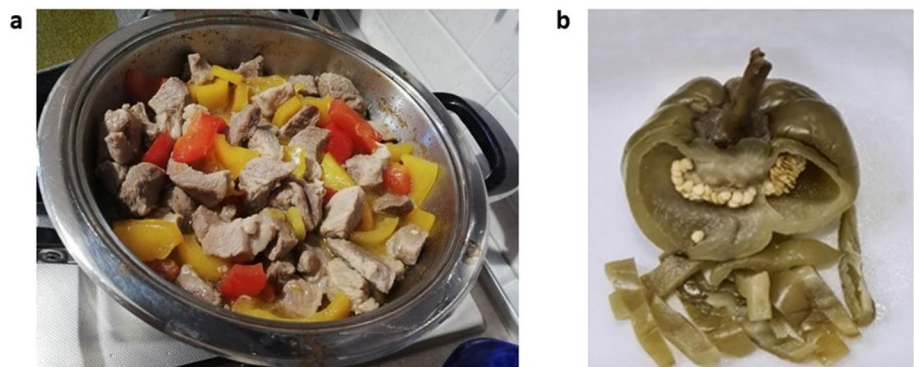
3.1.6 Meat-based dishes

Sfriunzolo is a very popular meat dishes of the Cilento cousine, based on pork cheek and pickled red and green peppers whose vernacular name is "Papaccelle".

The meat is browned in EVOO and then deglazed with white wine. Peppers are then added, and cooking is finished (Fig. 13).

To prepare the *Braciola alla cilentana* a pork or veal meat muscle is cut into a pocket, stuffed with onion, garlic, parsley, goat cheese, salted lard fillets, and chili pepper, then rolled up and closed with string or a toothpick and finally cooked in tomato sauce. Two recipes of *Fianchetto* are widespread in the study area, cooked in vegetable broth or tomato sauce. A piece of flank steak is stuffed with eggs, parsley and cacioricotta in the first case and with onion, garlic, parsley, cacioricotta, and salted lard fillets, in the second. To prevent the stuffing from coming out during cooking, the flank steak is first sewn.

Fig. 13 *Sfriunzolo* (a); Green "papaccella" (b)



3.1.7 Pasta

According to the interviews industrially produced dry pasta was not commonly utilized. Pasta was usually home-made, and 4 types were used: *cavatielli*, *fusilli*, *lagane*, and *ravioli*. The process of preparing pasta remains the same, regardless of the pasta shape. The ingredients for making different types of pasta include durum wheat semolina, water, and salt. These ingredients are combined in a bowl until the flour absorbs all the water. The resulting dough is then placed on a pastry board and kneaded manually for 5–10 min. The dough is then wrapped in a cloth (or food film in modern times) and allowed to rest at room temperature for at least 30 min. To prepare *cavatielli*, the procedure is as follows: obtain strings with a thickness of approximately 7mm from the loaf, cut them into 1 cm pieces, and crush them using the outer side of the thumb (Fig. 14).

The preparation procedure for *fusilli* is similar, with the strings being cut into pieces measuring 6-7cm in length, and then spirally wound around a circular section underwire (Fig. 15).

Cavatielli, being a versatile pasta shape, can be seasoned with legumes, sauces, and even fish-based preparations. *Fusilli* are typically served with ragout or vegetable-based sauces. The procedure for preparing *lagane* involves rolling out the dough with a rolling pin or machine until it is approximately 1–1.5mm thick. Then, it is cut into strips measuring 4-5cm in length and about 1cm in width (Fig. 16).



Fig. 14 *Cavatielli* preparation (a, b) and the typical dish *Cavatielli* with ragout (c)

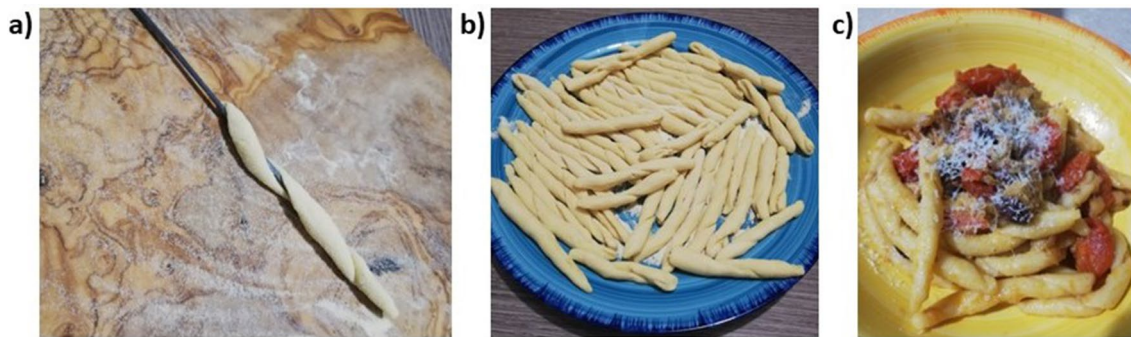


Fig. 15 *Fusilli* preparation (a, b) and the typical dish *Fusilli* with aubergines sauce (c)



Fig. 16 *Lagane* preparation (a, b) and the typical dish *Lagane* with chickpeas (c)

Lagane are exclusively used in the preparation of a dish called *Lagane e ceci*, which is based on chickpeas. It is noteworthy to point out that this dish is surviving in Italy since the antiquity, and it is more than probable that it was a rather common food among Romans. In Horace in fact, we read: *than I am back home to my chickpea and noodles bowl* [28].

Ravioli consist of small pockets of dough filled with a mixture of cheese, meat, vegetables, and herbs. The dough is typically made with flour and eggs and is rolled out thinly before being filled and sealed. The filling consists of Cilento buffalo ricotta, minced meat, red wine, Vatolla onion, carrot, celery, and basil. Ravioli is cooked by boiling in salted water until they float to the surface and are served with a tomato-based sauce. Ravioli can be shaped in various sizes and shapes, such as square, round, or half-moon.

3.1.8 Pizzas

Naples is undoubtedly considered the home place of pizza in the world. However, the consumption of this traditional dish is also common to other areas of the Campania region, such as the coastal Cilento. The basic dough is made up of flour, yeast and water and is left to rise for a few hours (up to 24 according to the current trend). The pizza is traditionally cooked in a wood oven for about 90 s at a temperature between 380 and 450 °C (716–842°F).

If the most famous Neapolitan pizza in the world is undoubtedly the *Pizza Margherita* (with tomato, mozzarella, EVOO and basil), in the coastal Cilento the *Pizza cilentana* is made only with tomato, garlic, EVOO, and grated goat cheese (Fig. 17a). A variant with fresh anchovies is also reported.

Stuffed pizzas are also part of the local tradition, the most common being the *Pizza chiena* whose dough is made with lard and filled with eggs, small pieces of salami, ham, and cheese (Fig. 17b).

Pizza co' levra is stuffed with wild leaf vegetables (e.g., *Sonchus* spp., *Cichorium intybus*, *Beta vulgaris* subsp. *maritima*, *Borago officinalis*) and fresh anchovies. Both stuffed pizzas, according to the tradition, ought to be cooked in a wood oven (nowadays sometimes replaced by electric ones) at a temperature of 180 °C (356 °F) for about 40 min.

3.1.9 Sweets

The traditional sweets of Cilento are known for the use of simple ingredients and traditional cooking methods, resulting in flavorful delicacies that have been enjoyed for generations. The best-known dessert in the whole area is the *Cannoli cilentani* (Fig. 18a). These differ from the more famous “sicilian cannoli”, for the filling which instead of ricotta is made with simple and chocolate custard. The dough is made with flour, eggs, melted lard, white wine, sugar and EVOO. As in the preparation of pasta (as mentioned above), the dough is allowed to rest at room temperature for a minimum of 30 min, after which it is rolled out into a thin sheet, sliced into square pieces, rolled up and then fried.

Scauratielli (or *scauratieddi*) are a very simple dessert consisting of a mixture of water, flour, orange and lemon peel, sugar, salt, white wine and EVOO (Fig. 18b). The dough is shaped into cylinders approximately 20 cm in length and 1 cm in thickness, forming the Greek letters alpha or beta, and subsequently fried in olive oil. Once cooled, the *scauratielli* are garnished with honey and a few sprigs of rosemary.

The ingredients of *Vicci cilentani* (or *Zeppole*) are wheat flour, potatoes, eggs, butter, limoncello liqueur, brewer's yeast, milk, and grated lemon peel, which are mixed (Fig. 18c). The resulting dough is then shaped into donuts and fried until golden brown, after which they are dusted with sugar.

Fig. 17. Pizza cilentana (a)
Pizza chiena (b)

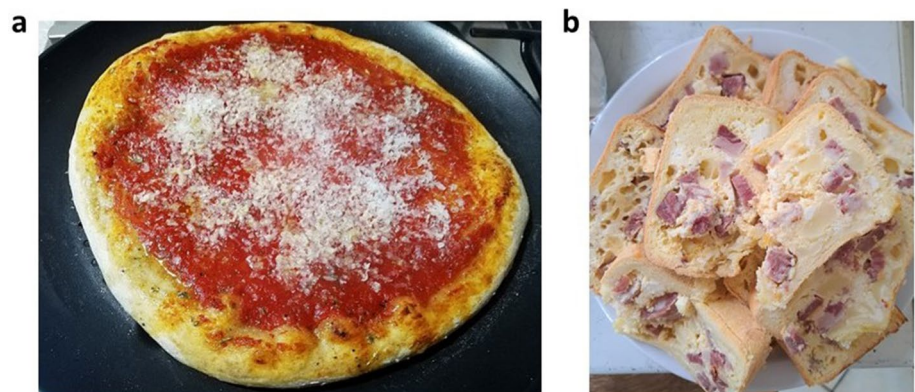




Fig. 18 Typical Cilento desserts. *Cannoli* (a); *Scauratielli* (b); *Vicci* (c); *Rose di Carnevale* (d); *Pizza roce* (e); *Fichi impaccati* (f)

Pastiera is made with a shortcrust pastry shell and filled with a mixture of milk, boiled rice, grated lemon peel, sugar, butter, ricotta cheese, diced candied fruit, and eggs. The pie is then baked until it forms a golden-brown crust on top. The recipe has been passed down through generations, and each family may have their own version. Sometimes rice is replaced with cooked wheat, in this case the dessert is very similar to the famous *Neapolitan pastiera*. *Rose di Carnevale* are desserts made with thin discs of dough, cutted in four parts leaving the center entire and fried overlapping, obtaining a rose shape (Fig. 18d). The fritter is then filled with custard and decorated with a candied cherry in the center and ice sugar. *Pizza roce* is a sponge cake covered with icing and candied fruit (Fig. 18e). *Fichi impaccati* are figs ("Cilento white fig") cut in half, stuffed with almonds, lemon peel, wild fennel seeds, then threaded onto a broom stick (Fig. 18f).

3.2 Food and ritual celebrations in the folk tradition

Festive dishes are those inextricably linked to their places of origin, they form part of the sense of belonging, and of the preservation of traditions in which each family has its own recipes, that are proudly handed down from generation to generation. In this we must once again underline the poverty and scarcity of resources that characterized the study area in the past, and which forced the locals to consume "rich dishes" only on certain days of the year. The interviews confirm, in fact, that the preparation of some dishes, such as desserts, pasta, or meat-based dishes, in the past was traditionally kept only for special occasions (e.g., weddings, baptisms, and Sundays) and seldom appeared on the tables on other days of the year. In particular, some dishes were linked to religious holidays, and this habit has been preserved up to the present day. *Pizza chiena*, for example, is eaten on Easter day after the ecclesiastical fast which forbids the eating of meat. *Pastiera*, *Pizza roce* and *Pasticelle* are the traditional sweets prepared for the same celebration. *Nocche* and *Scauratielli* are instead the typical sweets of the Christmas holidays. A particularly heartfelt recurrence in Cilento is undoubtedly the Carnival and for this day some typical dishes are reserved such as the *Polpette di Carnevale*, and among the desserts, the *Rose di Carnevale* and *Castagnole*.

Finally, the important role that village festivals have in the dissemination and conservation of local gastronomic culture should be underlined. In fact, dozens of festivals are dedicated, especially in the summer, to local products and recipes (e.g. chickpeas, figs, aubergines, bread, chestnuts or traditional dishes such as *Maracucciata*, *Pizza cilentana*, *Sfriunzolo*, etc.). Located in the village of Pioppi, the Mediterranean Diet Museum hosts the annual Mediterranean Diet festival which commemorates the discoveries made by the American physiologist Ancel Keys. The festival features conferences, debates, music and tastings. Moreover, in line with the insights of Scepi and Petrillo [29], we can emphasize that these holidays and festivals are a communal projection of what occurs within individual family homes, highlighting why many

activities happen outdoors. This setting allows for the visibility of both individual and familial openness to the larger society and community. Consequently, these mass celebrations tend to reinforce social connections, fostering a sense of neighborly bonds, mutual support, sharing, and joyful togetherness.

3.3 Local cuisine is part of the Mediterranean diet model with recognized health implications

Local farming, shopping, and cooking procedures are certainly, and mostly, consistent with a Mediterranean dietary model. Although basically an omnivore diet, the Mediterranean diet is characterized by high-level intake of plant-based foods such as vegetables, fruit, nuts, legumes, and minimally processed cereals, moderately high consumption of fish, low intake of saturated fat, meat, and dairy products and regular, but moderate, consumption of alcohol [30]. Based on the interviews the study area has a large variety of fruits and vegetables produced and consumed locally. Cilento boasts a long tradition of cultivating vegetables and possesses a wealth of local vegetable varieties. These unique varieties have been developed by generations of farmers through iterative, straightforward selection processes, conducted independently over time. Local varieties of legumes ("Cicerale" chickpea, "Controne" bean, "Maracuoccio di Lentiscosa"), artichokes ("Bianco di Pertosa"), figs ("Bianco del Cilento"), chestnut ("Marrone di Roccadaspide"), olives ("Salella"), onions ("Vatolla"), wheat ("Carosello di Pruno") as well as a variety of cheeses and cured meats, constitute the basic elements of the traditional local diet. Numerous wild edible species with high nutraceutical properties are also an integral part of the daily diet in coastal Cilento as also supported by several authors (e.g. [31–33]). All these are main ingredients of several of the above recipes and local dishes. Such traditional and healthy dietary pattern is associated to both prevention and treatment of several diseases including obesity, type 2 diabetes, inflammatory and cardiovascular diseases [34–36]. In addition, the vegetarian-oriented dietary style can lead to benefits directly or through the impact of diet on the gut microbiome, the ecosystem of microbial symbionts living in the gut, which has a pivotal role in human health [37–39]. In this, a key role is played by the practice of well-established local agriculture, often at a family level, enabling the consumption of fresh, non-industrial vegetable products. This, in turn, often guarantees better nutraceutical properties. Although the beneficial effects of the Mediterranean diet are mainly due to the intake of the specific foods contained therein, the effect is surely complemented by a characteristic Cilento rural lifestyle, raw materials availability, and human genetics. In this regard is noteworthy to underline that under the regional law of November 6, 2018, No. 38, titled "Regulations for guiding towards the consumption of quality products and for food education in schools", published in the Gazzetta Ufficiale of the Campania Region on November 6, 2018, No. 81, the Campania Region mandates the inclusion of food education based on Mediterranean Diet, in all schools across Campania, spanning from nursery schools to elementary schools. The aim of this law is to promote the culture of proper nutrition, starting from the historical and cultural foundations of this region. Taking a concrete step, among other things, to counter childhood obesity, a widespread phenomenon with severe resulting health conditions.

3.4 Mediterranean diet, culture and heritage: the role of local traditional gastronomy

As highlighted by Moro [40], the term 'Mediterranean Diet,' now established as a "topos" both in everyday language and in the lexicon of science, including that of major international agencies such as UNESCO, WHO, and FAO, only began to gain traction in the 1970s when coined by Ancel Keys and his wife Margaret. It was immediately clear to these authors that this term should effectively encapsulate the correlation between nutrition and psychophysical well-being, as well as various aspects of social life, habitat, food quality, nutritional diversity, cooking methods, physical activity, air quality, and the symbolic importance attributed to food, among many other socio-cultural elements. Although challenging to quantify, these factors equally play a crucial role in determining the quality of people's health. Initially the term generated some distrust due to the use of the notion of diet which can mislead and lead one to think only of a mere low-calorie diet and not, instead, of a real lifestyle as should be correctly understood but the authors judged it is essential to use a label that can be used internationally and is easily communicated.

The notion of the Mediterranean diet has gradually evolved since its creation, transforming over the last 50 years from being viewed primarily as a healthy dietary pattern, mainly for heart health, to being regarded as a model for a sustainable diet, passing through culture and heritage on the way [41, 42]. Therefore, the Mediterranean diet evolved from being solely based on medical and nutritional aspects to encompassing broader connections with society, culture, and lifestyles [43]. In this regard, and beyond the scope of "healthy" discussions, the UNESCO recognized the Mediterranean Diet as a set of skills, insights, customs, symbols, and traditions, spanning from the environment to culinary practices. The Mediterranean diet is a representation of the shared cultural experiences and food traditions of various communities residing in the Mediterranean

region, each with its own unique food cultures, lifestyles, and environmental influences [44]. In this sense, the Mediterranean Diet can no longer be considered a homogeneous model fitting every country and region since it often revolves around distinct local ingredients and cooking traditions [45]. It's important to note, as highlighted by Marques da Silva [46], that the proposal for inclusion on the Representative List held significant socio-economic value. It was primarily motivated by a strategic initiative aimed at establishing an overarching 'umbrella brand'—the 'Med label'—for agro-food products throughout the entire Mediterranean region. This initiative aimed to unite and promote these products under a singular banner, fostering wider recognition and market appeal across the Mediterranean area. With the modernization of agriculture and the globalization of food occurring in the latter half of the twentieth century, concepts such as sustainable diets and human ecology have been sidelined in favor of intensification and industrialization within agricultural systems [47]. However, the Mediterranean diet continues to be regarded politically as an autonomous entity, rather than as an integral part of a broader social and cultural Mediterranean food system. Health or food consumption is still considered in isolation from agricultural and fisheries production, economic aspects such as sales and import–export, and the preservation of traditional distribution and sales structures [48]. In this context, it is important to ensure that agriculture aims not only at good nutrition but also at sustainability. It is recognized that different dietary patterns can be healthy, but their differences could be significant in terms of resource use and environmental impact. This highlights the idea that the healthiness of a diet should not overshadow its potential environmental consequences in terms of their resource cost or their environmental impact [47]. The goal here is also to assess members' perception of their own food culture to question the assumption that they inherently possess a conscious sense of belonging to a larger Mediterranean collective defined by shared food traditions, rather than simply assuming it.

On the other the enduring presence of traditional cuisine, serving as both culinary and cultural heritage, faces the risk of erosion due to the invasion of standardized foods. This influx could potentially impact the health and cultural heritage of Mediterranean countries [49]. The decrease of food diversity has raised growing concerns among researchers, farmers, and consumers regarding its implications for food security, human health, and food sovereignty [50, 51].

In this context, understanding the biodiversity present in local traditional food systems is vital for enhancing existing dietary tools and creating new ones [52, 53]. The enduring presence of gastronomic tradition in Cilento, closely linked to local produce, manifests itself not only in the daily diets of families and celebratory occasions but also forms an integral part of restaurant menus. This deep-rooted tradition proves fundamental in counteracting the global loss of food diversity and, on the other hand, of a local cultural heritage. In this sense, it was interesting to note, during this research, that younger individuals are more aware than older people of the cultural and ecological importance of local gastronomic traditions, extending beyond health-related aspects.

3.5 Ingredients seasonality: a link to the ecological calendars

One prevalent characteristic of Cilento cuisine is its unwavering adherence to ingredient seasonality. This practice often stems from the interviewees' ownership of family gardens or their roots in peasant families. In this context, specific dishes such as *Ciambotta*, *Melanzane 'buttunate* and *ammolliciate*, *Acqua cecata*, *Acqua sale* etc. are exclusively consumed during the summer season. Artichoke-based preparations are enjoyed from late winter to early spring, while dishes featuring asparagus and broad beans become popular in early spring. Meat-based dishes, especially pork, find their place only in winter, a tradition harking back to ancient times when the slaughter of this animal occurred between early December and January. Ingredients seasonality acts therefore as a natural ecological calendar, dictating the rhythm and scope of culinary possibilities throughout the year. Embracing this seasonality fosters a profound comprehension of the ecological interdependence between humanity and nature, acknowledging their significance beyond mere nourishment. Ecological calendars (also referred to as natural or phenological calendars), are systems of knowledge used to gauge and interpret time through careful observation of one's surroundings. These calendars rely on context-specific phenological knowledge developed by communities who have lived in specific landscapes for many generations [54]. Hence, Traditional Knowledge (TK) and ecological calendars align as historical methods through which human societies traditionally anticipated seasonal changes. They assist local communities in making informed decisions regarding food production and enable anticipation of seasonal processes, and environmental weather patterns [55].

4 Conclusions

Studying the consumption, preference, and consideration of a territory's most emblematic foods is essential to characterize its typical gastronomy. Based on the results of the present study, it can be observed that local culinary traditions have maintained remarkably well in the coastal Cilento region. Based on the use of mainly locally produced vegetable and fish raw materials, traditional Cilento gastronomy is in line with the dictates of the Mediterranean Diet. Food consumption also maintains a high social value in family life and is still closely linked with ritual practices. The local gastronomy also plays a direct role of tourist attraction in this area, being a relevant objective alongside the natural, architectural, and historical beauties of the place. Therefore, the richness of Cilento's gastronomic heritage not only reflects a culinary tradition but also encapsulates a profound connection between food, culture, and the environment. Preserving and promoting this legacy is not merely a matter of sustaining tradition; it is a commitment to safeguarding cultural diversity, ecological harmony, and human well-being. By acknowledging this as the inaugural systematic study, we highlight its unique contribution to the understanding of traditional cuisine in the region and its potential implications for future research and preservation of culinary heritage.

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Data availability All the relevant data generated or analyzed during this study are included in this published article.

Declarations

Ethics approval and consent to participate The study was conducted in accordance with the Declaration of Helsinki; an Ethics Committee does not yet exist at the corresponding author's institution. The field study was conducted strictly following the Ethical Code of the International Society of Ethnobiology (ISE, 2006). However, the formal consent was taken verbally from informants regarding data collection and publication. No photographs of the participants were taken nor any other data that could allow their identification. No minors were interviewed.

Consent for publication Not applicable.

Competing interests The author declares no conflict of interests.

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