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# CULINARY INTEGRATION HANDBOOK

**FOOD4ALL: NOURISHING INCLUSIVITY AND DIVERSITY  
IN THE FOOD SECTOR FOR PEOPLE WITH SPECIAL  
DIETARY REQUIREMENTS**

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# CULINARY INTEGRATION HANDBOOK

## FROM CLASSROOM TO KITCHEN

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## CHAPTER 1 – INTRODUCTION

### 1.1 ABOUT THE FOOD4ALL PROJECT

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The FOOD4ALL project – *Nourishing Inclusivity and Diversity in the Food Sector for People with Special Dietary Requirements* – was developed in response to evolving expectations within the food, hospitality, and vocational education sectors regarding inclusivity, dietary diversity, food safety, and sustainability. Across Europe, culinary professionals are increasingly expected to serve a diverse range of consumers whose dietary choices, health conditions, allergies, intolerances, cultural backgrounds, ethical preferences, and religious requirements influence the way food is prepared, presented, and consumed.

As culinary professions continue to evolve, vocational education and training (VET) systems face growing pressure to ensure that future professionals possess not only technical cooking skills but also the knowledge and competences required to respond appropriately to diverse dietary needs. This includes understanding food allergies and intolerances, preparing meals for individuals with specific health-related dietary requirements, accommodating cultural and religious dietary practices, applying sustainable culinary principles, and communicating effectively with consumers regarding ingredients and food preparation processes.

Within this context, FOOD4ALL seeks to strengthen the capacity of culinary VET providers, teachers, trainers, and learners by developing educational resources that support more inclusive and diverse approaches to food preparation and culinary practice. Through the development of specialised learning content and digital learning opportunities, the project contributes to expanding the scope of culinary education beyond traditional food preparation techniques and towards a more comprehensive understanding of contemporary food service realities.

The project recognises that developing innovative educational resources alone is not sufficient to generate lasting change. For educational innovation to have a meaningful impact, it must be capable of being integrated into existing teaching structures, institutional practices, and training programmes. This understanding forms the foundation of Work Package 4 (WP4), which focuses on supporting the practical integration of FOOD4ALL results within existing culinary VET environments.

### 1.2 WHY INCLUSIVE CULINARY EDUCATION MATTERS

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The culinary profession has always been closely connected to social, cultural, and economic developments. Today, this relationship is becoming increasingly visible as food service providers encounter a growing diversity of dietary expectations among consumers.

Restaurants, catering services, hospitality businesses, institutional kitchens, and community food providers are expected to accommodate a broad spectrum of dietary requirements while maintaining standards of quality, safety, accessibility, and customer satisfaction.

For culinary professionals, responding effectively to these expectations requires a combination of technical expertise, nutritional awareness, food safety knowledge, and sensitivity to individual needs. The ability to adapt recipes, prevent allergen cross-contamination, develop appropriate menu alternatives, and communicate confidently about ingredients and preparation methods has become an important aspect of professional culinary competence.

Despite these developments, the integration of inclusive culinary topics within vocational education systems remains uneven. Existing gastronomy and food-service training programmes often prioritise core culinary techniques, food safety, and operational skills, while areas such as allergen management, special dietary requirements, cultural dietary diversity, sustainable menu planning, and health-oriented cooking may receive limited or fragmented attention. In many cases, these topics are addressed only as supplementary content rather than being systematically connected to practical culinary training.

This creates a challenge for both educators and learners. Teachers and trainers may recognise the importance of these topics but lack clear guidance on how to incorporate them into existing training programmes. At the same time, learners may complete culinary training without sufficient exposure to the practical realities they are increasingly likely to encounter in professional environments.

The FOOD4ALL project responds to this challenge by promoting a broader understanding of culinary competence—one that combines technical excellence with inclusivity, adaptability, and responsiveness to diverse dietary needs. Rather than treating special dietary requirements as a niche or specialised topic, FOOD4ALL positions them as an increasingly relevant dimension of contemporary culinary practice.

### 1.3 FROM INNOVATION TO INTEGRATION: THE ROLE OF WP4

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One of the central lessons emerging from educational innovation projects is that the development of high-quality learning resources does not automatically lead to their adoption within educational systems. Innovative content may remain underused if institutions, teachers, and trainers lack practical guidance on how to integrate it into existing programmes.

This challenge is particularly relevant in vocational education, where training programmes are often shaped by national qualification structures, curriculum requirements, institutional

constraints, assessment systems, and workplace expectations. New educational resources must therefore be compatible with existing teaching realities if they are to achieve meaningful and sustainable impact.

Work Package 4 was created specifically to address this challenge. While previous work packages focused on the development of FOOD4ALL learning content and digital educational resources, WP4 shifts attention towards implementation and institutional usability. Its primary concern is not the creation of additional content, but the practical integration of existing project outputs into established VET structures.

The philosophy underpinning WP4 is based on adaptation rather than replacement. The work package does not seek to redesign national curricula, establish new qualification frameworks, introduce accreditation systems, or prescribe uniform educational models across countries. Instead, it provides a structured framework that supports institutions in adapting FOOD4ALL resources to their own educational contexts.

In this sense, WP4 functions as a bridge between innovation and implementation. It translates project outputs into practical guidance that can be used by institutions, teachers, and trainers operating within different national systems and organisational contexts. By focusing on integration pathways, curriculum compatibility, pedagogical implementation, and institutional readiness, WP4 seeks to maximise the relevance, accessibility, and long-term sustainability of FOOD4ALL results.

The development of this framework is grounded in evidence gathered through cross-country analyses of existing culinary VET provision and through consultations with field experts. This approach ensures that integration recommendations are informed by real educational contexts rather than theoretical assumptions alone. As a result, the handbook reflects both the diversity of existing VET systems and the practical realities faced by educators working in culinary training environments.

## 1.4 PURPOSE OF THE CULINARY INTEGRATION HANDBOOK

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The Culinary Integration Handbook – *From Classroom to Kitchen: VET Integration Framework in Culinary Education* – represents the main outcome of WP4. Its purpose is to support the effective incorporation of FOOD4ALL educational resources into existing vocational education and training programmes.

The handbook has been designed as a practical integration framework rather than a curriculum document. It does not prescribe what institutions must teach, nor does it establish mandatory learning outcomes. Instead, it provides guidance on how FOOD4ALL content can

be aligned with existing programmes, learning activities, teaching approaches, and institutional requirements.

The handbook brings together evidence gathered throughout WP4 and translates this evidence into actionable recommendations. It provides institutions with a structured approach for considering where and how FOOD4ALL content may fit within their existing provision. At the same time, it offers teachers and trainers practical support for connecting digital learning resources with classroom teaching, workshop activities, and kitchen-based learning experiences.

A key objective of the handbook is to reduce barriers to adoption. Educational innovation is more likely to be sustained when educators can clearly see how new content relates to existing curricula, assessment practices, and teaching responsibilities. By focusing on compatibility rather than replacement, the handbook seeks to facilitate realistic and achievable forms of integration.

Ultimately, the handbook serves as a tool for supporting institutional uptake, pedagogical implementation, and the long-term sustainability of FOOD4ALL results across diverse educational settings.

## 1.5 TARGET AUDIENCE

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The handbook has been developed for a broad range of stakeholders involved in culinary vocational education and training.

Its primary audience consists of VET teachers and trainers who are directly responsible for designing and delivering culinary learning experiences. For these users, the handbook provides practical guidance on incorporating inclusive culinary topics into existing teaching and learning activities.

The handbook is also intended for curriculum developers, programme coordinators, school leaders, and institutional decision-makers who are responsible for programme planning, quality assurance, and educational development. For these stakeholders, the handbook offers a framework for considering how FOOD4ALL content can be integrated at programme or institutional level.

In addition, the handbook may be useful for in-service training providers, professional development coordinators, and organisations involved in the continuous upskilling of culinary professionals. Its integration-focused perspective enables adaptation across a variety of formal and non-formal training environments.

Although developed within the context of partner-country VET systems, the principles and approaches presented throughout the handbook are designed to be sufficiently flexible to support implementation in diverse educational contexts.

## 1.6 THE “FROM CLASSROOM TO KITCHEN” APPROACH

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The title *From Classroom to Kitchen* reflects the central implementation logic of this handbook: FOOD4ALL resources become meaningful only when they are translated into practical culinary learning, professional routines, and real kitchen decision-making. In culinary VET, knowledge is not complete when learners can define a concept; it becomes professionally relevant when learners can apply that knowledge safely, responsibly, and creatively in authentic food preparation and service contexts.

This approach recognises that inclusive culinary education cannot be delivered as an additional theoretical topic detached from existing training. Issues such as allergen management, recipe adaptation, plant-based cooking, health-related dietary needs, cultural and religious food practices, and sustainable menu planning are most effectively learned when they are connected to the practical situations in which future culinary professionals will actually use them. A learner may understand allergen information in principle, but professional competence requires being able to organise a workstation, prevent cross-contamination, adapt ingredients, communicate risks, and maintain quality under real kitchen conditions.

For this reason, the handbook treats FOOD4ALL resources as bridges between digital learning, classroom preparation, kitchen-based practice, and workplace learning. The classroom provides the conceptual foundation; the digital platform supports preparation, revision, and self-assessment; the kitchen allows learners to test and refine their understanding through supervised practice; and workplace learning strengthens the transfer of these competences into professional environments.

The “From Classroom to Kitchen” approach therefore supports a practical integration model rather than a content-delivery model. It encourages teachers and trainers to embed FOOD4ALL materials into existing modules, practical tasks, demonstrations, menu design exercises, customer-service scenarios, and assessment activities. In doing so, the handbook aims to ensure that inclusive culinary education is not treated as a separate or occasional theme, but as a natural part of professional culinary competence.

## 1.7 STRUCTURE OF THE HANDBOOK

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The handbook is structured to move progressively from context analysis to practical implementation. Each chapter has a specific role in building the integration framework and supporting the use of FOOD4ALL resources within existing culinary VET environments.

Chapter 2 presents the cross-country training landscape analysis carried out across the partner countries. It examines existing culinary VET provision, relevant EQF levels, content coverage, learner and trainer profiles, teaching methodologies, assessment practices, and the main strengths and gaps identified in each national context. This chapter establishes the evidence base for the handbook by showing where FOOD4ALL resources can realistically respond to current training needs.

Chapter 3 presents the findings of the focus group meetings conducted with VET teachers, trainers, culinary professionals, dietitians, nutrition experts, food safety specialists, learners, and other stakeholders. The chapter focuses on curriculum alignment, digital readiness, preferred pedagogical approaches, assessment possibilities, and support needs for trainers. These findings ensure that the integration framework is grounded not only in desk research, but also in the practical experiences and expectations of those working directly in culinary education and training.

Chapter 4 develops the curriculum alignment framework for inclusive culinary education. It explains the educational principles that guide the handbook, including constructive alignment, competence-based education and training, experiential learning, situated learning, and Universal Design for Learning. The chapter clarifies why FOOD4ALL resources should be aligned with existing learning outcomes, practical activities, and assessment methods rather than introduced as isolated additional content.

Chapter 5 focuses on digital integration strategies for culinary VET. It explains how the FOOD4ALL platform and digital resources can support practical training through flipped learning, scenario-based learning, problem-based learning, and reflection after kitchen practice. Particular attention is given to the before–during–after integration cycle, which positions digital tools as support for practice rather than as a substitute for hands-on culinary learning.

Chapter 6 translates the evidence and pedagogical framework into an implementation roadmap. It identifies realistic entry points within existing culinary programmes, including food safety and hygiene, basic culinary skills, kitchen operations, menu preparation, nutrition basics, and work-based learning. It also provides practical pathways and ready-to-use scenarios to help VET schools, training centres, higher education gastronomy programmes, and in-service training providers embed FOOD4ALL resources in ways that are feasible, flexible, and sustainable.



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Taken together, the chapters guide the reader from understanding the need for inclusive culinary education to applying FOOD4ALL resources in real teaching and training contexts. The handbook therefore functions not as a theoretical report alone, but as a practical bridge between project results, curriculum realities, trainer needs, and professional kitchen practice.

## CHAPTER 2 – CROSS-COUNTRY TRAINING LANDSCAPE ANALYSIS

The development of effective integration pathways requires a clear understanding of the educational environments in which project results are expected to be implemented. For this reason, the first analytical stage of WP4 focused on examining the existing vocational education and training (VET) landscape relevant to culinary education across the FOOD4ALL partner countries. Through a structured cross-country analysis, partners explored how gastronomy and food-service training programmes currently address topics related to food safety, nutrition, special dietary requirements, allergen management, cultural and dietary diversity, health-oriented cooking, and sustainable culinary practices. The analysis also examined training methodologies, learner profiles, trainer qualifications, and assessment approaches in order to identify existing strengths, gaps, and opportunities for integration. Rather than comparing national systems against a single model, the purpose of this exercise was to understand the realities of different educational contexts and to establish an evidence-based foundation for the integration framework presented in this handbook. The findings presented in this chapter therefore provide the contextual basis for the recommendations, pedagogical guidance, and implementation pathways developed in the subsequent chapters.

### 2.1 FRANCE

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#### 2.1.1 OVERVIEW OF VET PROVISION

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The national training landscape report for France identifies three distinct culinary training programmes at different EQF levels:

- Professional Aptitude Certificate in Culinary Arts (CAP Cuisine) – EQF Level 3, 2 years, delivered in public VET schools and apprentice training centres
- Professional Baccalauréat with a culinary arts specialisation (Bac Pro Cuisine) – EQF Level 4, 3 years, delivered in public VET schools and apprentice training centres
- Advanced Technician's Certificate specialising in culinary production units (BTS) – EQF Level 5, 2 years, delivered in public schools and vocational training centres

The three programmes represent a progressive qualification pathway, from foundational kitchen assistant training at CAP level through to supervisory and production management roles at BTS level. The national narrative report for France confirms that certifications such as the CAP Cuisine and Bac Pro Restauration are recognised across the country and provide strong employment opportunities. Most programmes include structured on-the-job training

components: approximately 16 weeks for the CAP and 20 weeks for the Bac Pro, spread across the training period.

### 2.1.2 Content Coverage

CAP Cuisine (EQF 3):

The CAP in Culinary Arts is a practice-oriented vocational training course aimed at training kitchen assistants for institutional or commercial catering. Following a government decree of 2023, the programme now incorporates the principles of vegetarian cooking and takes into account the diversity of clients. The programme also teaches how to provide consumers with better information on allergens and the origin and composition of products. The first students under the updated programme will graduate in 2026. The narrative report adds a critical implementation note: although the new curriculum requirements relating to sustainability and the vegetalisation of meals have been issued by government, teachers have not been trained to adapt to these new requirements, and there is a reported lack of expert resources and means at institutional level.

| Subject Area                     | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills          |             | ✓                   | ✓                   | ✓                   |
| Food safety and hygiene          |             | ✓                   | ✓                   | ✓                   |
| Nutrition basics                 |             | ✓                   |                     | ✓                   |
| Special diets (vegan/vegetarian) |             | ✓                   |                     |                     |
| Food allergies and intolerances  |             | ✓                   | ✓                   |                     |
| Sustainable cooking practices    |             | ✓                   |                     |                     |
| European/international standards |             | ✓                   |                     |                     |

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| Food Labelling and Consumer Info  |             | ✓                   |                     |                     |
| Cultural and Dietary Diversity    |             | ✓                   |                     |                     |
| Health-Oriented Cooking Practices |             | ✓                   |                     |                     |

#### Bac Pro Cuisine (EQF 4):

The Professional Baccalauréat aims to train professionals capable of mastering advanced culinary techniques, organising production, managing a team, and contributing to establishment management. Students must be able to adapt food production to customer needs, including specific dietary requirements and special constraints. Allergens are taken into account in food production in accordance with food safety and regulatory requirements. The programme includes 20 weeks of on-the-job vocational training over three years.

| Subject Area                     | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills          |             | ✓                   | ✓                   | ✓                   |
| Food safety and hygiene          |             | ✓                   | ✓                   | ✓                   |
| Nutrition basics                 |             | ✓                   | ✓                   | ✓                   |
| Special diets (vegan/vegetarian) |             | ✓                   | ✓                   |                     |
| Food allergies and intolerances  |             | ✓                   | ✓                   | ✓                   |

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| Sustainable cooking practices     |             | ✓                   |                     |                     |
| European/international standards  |             | ✓                   |                     |                     |
| Food Labelling and Consumer Info  |             | ✓                   | ✓                   | ✓                   |
| Cultural and Dietary Diversity    |             | ✓                   |                     |                     |
| Health-Oriented Cooking Practices |             | ✓                   |                     |                     |

#### BTS – Advanced Technician's Certificate (EQF 5):

The BTS programme trains professionals capable of managing and organising culinary production. While culinary skills remain central, the curriculum places a strong emphasis on food safety and hygiene regulations, and specific dietary requirements receive greater consideration. European standards, labelling, traceability, and consumer information are studied from a managerial perspective. Graduates are prepared to serve as sous-chef, chef de partie, or head of production.

| Subject Area            | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills |             | ✓                   | ✓                   | ✓                   |
| Food safety and hygiene |             | ✓                   | ✓                   | ✓                   |
| Nutrition basics        |             | ✓                   | ✓                   | ✓                   |

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| Special diets (vegan/vegetarian)  |             | ✓                   |                     | ✓                   |
| Food allergies and intolerances   |             | ✓                   | ✓                   | ✓                   |
| Sustainable cooking practices     |             | ✓                   |                     |                     |
| European/international standards  |             | ✓                   |                     |                     |
| Food Labelling and Consumer Info  |             | ✓                   | ✓                   | ✓                   |
| Cultural and Dietary Diversity    |             | ✓                   |                     |                     |
| Health-Oriented Cooking Practices |             | ✓                   |                     |                     |

### 2.1.3 Learner and Trainer Profile

Most VET trainees in culinary programmes in France are young people between 18 and 22 years old, the majority of whom have completed technical studies prior to enrolment. The CAP is predominantly accessed by initial VET students aged 16–18. A smaller but notable proportion consists of adults pursuing retraining as cooks or service staff, though this represents a minority of the overall learner population. At BTS level, most trainees hold a Professional Baccalauréat and are typically aged 18–22. Adult culinary training centres, by contrast, attract a more mixed learner profile, including working professionals and career changers.

Trainers across all three French programmes hold culinary expertise and culinary certification. They may hold either a Certificate of Qualification for Teaching at a Vocational High School in the Hospitality and Restaurant Industry, or a status as a contract teacher. In public VET schools, teachers are mainly trained in pedagogy, whereas in vocational training

centres they are experienced catering professionals. Some trainers are part-time and maintain a second role in the catering sector or a related field — for example as specialists in food and drink regulations. Formal pedagogical certification is not required. Familiarity with food safety and allergen regulations is reported as high. Training on special diets and allergens is described as ad hoc. Continuous professional development is occasional. The narrative report notes that trainers are required to have significant culinary expertise, knowledge of HACCP, allergen management, nutrition, and specific cuisines including vegan cuisine, and that some trainers are dietitians, restaurant managers, or food safety experts contributing interdisciplinary perspectives.

#### 2.1.4 Teaching Methodology

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Across all three French programmes, the following methods are widely used (rated 5 out of 5 in focus group consultations during national landscape analysis): classroom-based theoretical instruction, trainer-led culinary demonstrations, hands-on kitchen practice, work-based learning, and recipe-based practical exercises. Menu planning and costing exercises, case-based learning, and project-based learning are used at varying levels. Simulation and role-play, as well as digital and e-learning components, are reported as low (rated 1 out of 5) in the CAP and Bac Pro, and rated 4 in the BTS. The narrative report confirms that practical and hands-on workshops are the dominant methodology and notes that programme content is practically oriented, enabling a quick transition to the job market.

#### 2.1.5 Gaps Identified (France)

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- Sustainable cooking practices are covered at theoretical awareness level only and are not applied or assessed in any of the three programmes; despite the 2023 curriculum update introducing requirements for sustainability content, schools currently lack the means and trained experts to implement this effectively
- Cultural and dietary diversity is covered only at basic level and is not applied or assessed; no courses specifically address cultural and ethical dietary preferences such as halal or kosher
- Health-oriented cooking practices are covered at basic level only and are not formally assessed at CAP or Bac Pro level
- Digital and e-learning tools are minimally used at CAP and Bac Pro levels (rated 1 out of 5), though more present at BTS level (rated 4); a lack of IT equipment at training centres was identified as an access barrier
- Simulation and role-play remain minimally used (rated 1–2) across all three programmes

### 2.1.6 Strengths Identified (France)

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- Strong and consistent coverage of food safety, hygiene, and allergen management across all three levels, with high trainer familiarity with food safety and regulatory requirements
- Allergen management and food labelling are formally assessed at Bac Pro and BTS levels
- The 2023 curriculum reform of the CAP has introduced vegetarian cooking principles and allergen consumer information, reflecting regulatory alignment and a willingness to update national curricula
- Significant on-the-job training components (16 weeks for CAP, 20 weeks for Bac Pro) ensure real professional exposure
- Comprehensive assessment methods at all levels, including practical exams, continuous assessment, workplace-based assessment, and hygiene compliance
- National recognition of qualifications (CAP Cuisine, Bac Pro) provides strong and reliable employment pathways

### 2.1.7 Insights from Focus Group Consultations in National Landscape Analysis

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The focus group consultations for France drew on two distinct activities: a structured online FGM conducted with eight trainers from culinary training centres (April–May 2026), and a narrative focus group held in person, which brought together 20 participants including dietitians, nutritionists, food safety trainers, a gluten-free and lactose-free patisserie director, VET school trainers, an agri-food engineer, and twelve apprentices from a vocational school.

Expert perceptions and key challenges identified:

Participants consistently emphasised that learning through practice is the most effective method. Trainers generally conduct demonstrations followed by hands-on practice in which learners reproduce the technical gestures observed. Practical kitchen contexts require significant supervision and genuine teamwork. Participants noted that the FOOD4ALL platform could support flipped classroom approaches: learners could access platform information before engaging in practical activities and deepen their learning through collective reflection during class.

Participants highlighted the lack of IT equipment available during training as a practical constraint and emphasised that any digital resource must be accessible directly on students' mobile phones. The digital resource was seen as a complement to courses and not as a replacement for any part of the training content. Adult learners in culinary training centres were identified as having greater flexibility to use new digital resources independently, while younger initial VET students would typically require structured in-class support for platform use.

Preferred training methodologies:

The most effective methodologies identified by French experts were short trainings with asynchronous teaching possibilities but always with the possibility to reach someone to answer questions, combined with a variety of training materials. Experts emphasised the need for practice — to feel and to touch — in order to gain experience. Practical demonstrations by qualified trainers in professional kitchens were considered highly effective. Case studies to simulate real-life scenarios, such as managing cross-contamination risks or taking account of cultural food preferences, were specifically recommended. Game-based learning methods and virtual reality simulations were also mentioned as approaches that could be explored to enhance engagement.

A glossary of legume terms to help trainers and learners identify which condiment pairs with which ingredient was proposed as a practical tool. Experts also recommended practical workshops on how to diversify menus and audit a restaurant's practices with regard to current trends such as organic sourcing, seasonality, and short supply circuits.

Integration recommendations and institutional requirements:

Key trainer upskilling needs identified included: lifestyle choice diets (vegan, vegetarian, halal, kosher); sustainable sourcing, reducing food waste, and integrating organic and local produce into inclusive menus; education on the environmental impact of dietary choices; the use of innovative ingredients such as plant-based proteins and allergen-safe substitutes; plant-based cooking techniques; and food waste reduction including leftover management and composting practices in meal planning.

Regulatory context:

The relevant legal and regulatory frameworks influencing VET content in France, as identified by focus group participants, include HACCP, the INCO Regulation (EU Regulation 1169/2011 on food information to consumers), the EGALIM law (French national food sector legislation), and the National Nutrition and Health Programme (PNNS). Participants also drew attention to an international example: Argentina has a specific law requiring at least one gluten-free dish on every restaurant menu, which was cited as an illustration of the regulatory ambition possible in this area.

## 2.2 NORTH MACEDONIA

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### 2.2.1 Overview of VET Provision

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The national training landscape report for North Macedonia identifies three distinct culinary and food-related training programmes:

- Food Technician – EQF Level 4, 4-year secondary vocational education delivered in public secondary vocational schools

- Cook in Hospitality Facility – EQF Level 5, 156-hour short-term adult vocational training delivered through the Centre for Adult Education via accredited providers
- Gastronomy (Bachelor degree) – EQF Level 6, 3–4 years (180–240 ECTS), delivered by the Faculty of Tourism and Hospitality, St. Kliment Ohridski University – Bitola

### 2.2.2 Content Coverage

Food Technician (EQF 4):

The Food Technician programme is delivered over four years of secondary vocational education through modular curricula. Topics related to nutrition and dietary inclusivity are mainly addressed through Dietetics and Food and Nutrition modules. Specialised areas such as allergen management, plant-based cooking, or inclusive menu planning are not systematically covered within the curriculum. Food labelling and consumer information are listed as not covered.

| Subject Area                     | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills          |             | ✓                   | ✓                   | ✓                   |
| Food safety and hygiene          |             |                     | ✓                   | ✓                   |
| Nutrition basics                 |             | ✓                   |                     |                     |
| Special diets (vegan/vegetarian) |             | ✓                   |                     |                     |
| Food allergies and intolerances  |             | ✓                   |                     |                     |
| Sustainable cooking practices    | ✓           |                     |                     |                     |
| European/international standards |             | ✓                   |                     |                     |

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| Food Labelling and Consumer Info  | ✓           |                     |                     |                     |
| Cultural and Dietary Diversity    |             | ✓                   |                     |                     |
| Health-Oriented Cooking Practices |             | ✓                   |                     |                     |

#### Cook in Hospitality Facility (EQF 5, Adult Training):

This programme is designed for rapid professional training of adults for employment in the hospitality sector. The curriculum covers core culinary competencies including kitchen organisation, cooking technologies, and preparation of dishes. The programme includes modules on vegetarian, vegan, dietary, and gluten-free cuisine. Food safety and hygiene are integrated throughout the training; however, allergen management, food labelling, and sustainable cooking practices are not systematically addressed as standalone modules.

| Subject Area                     | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills          |             |                     | ✓                   | ✓                   |
| Food safety and hygiene          |             |                     | ✓                   |                     |
| Nutrition basics                 |             | ✓                   | ✓                   |                     |
| Special diets (vegan/vegetarian) |             |                     | ✓                   |                     |
| Food allergies and intolerances  |             | ✓                   |                     |                     |

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| Sustainable cooking practices     |             | ✓                   |                     |                     |
| European/international standards  |             | ✓                   |                     |                     |
| Food Labelling and Consumer Info  | ✓           |                     |                     |                     |
| Cultural and Dietary Diversity    |             |                     | ✓                   |                     |
| Health-Oriented Cooking Practices |             |                     | ✓                   |                     |

#### Gastronomy Bachelor Degree (EQF 6):

The Gastronomy study programme provides a comprehensive higher education approach combining culinary arts, food science, and hospitality management. The curriculum integrates both theoretical and practical components, including food preparation techniques, gastronomic traditions, food safety, nutrition, and menu development. Topics related to nutrition and health-oriented cooking are covered in more depth compared to VET programmes. Elements such as special diets, allergen management, and sustainable cooking practices are addressed at basic or partial level and are not consistently integrated across all courses.

| Subject Area            | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills |             |                     | ✓                   | ✓                   |
| Food safety and hygiene |             |                     | ✓                   | ✓                   |

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| Nutrition basics                  |             |                     | ✓                   | ✓                   |
| Special diets (vegan/vegetarian)  |             | ✓                   |                     |                     |
| Food allergies and intolerances   |             | ✓                   |                     |                     |
| Sustainable cooking practices     |             | ✓                   |                     |                     |
| European/international standards  |             |                     | ✓                   | ✓                   |
| Food Labelling and Consumer Info  |             | ✓                   |                     |                     |
| Cultural and Dietary Diversity    |             |                     | ✓                   | ✓                   |
| Health-Oriented Cooking Practices |             | ✓                   |                     |                     |

### 2.2.3 Learner and Trainer Profile

VET students in the culinary field in secondary education in North Macedonia are typically young adults aged 16 to 24 years. This is the age at which many individuals choose to enter the workforce or pursue specialised training, and enrolment in the Food Technician programme represents a direct route into vocational qualifications. For adult education programmes such as the Cook in Hospitality Facility, the learner profile differs substantially: trainees typically come from the culinary sector, are already working in the industry, and do not hold formal educational qualifications. They enrol in these programmes specifically to validate their existing knowledge and practical skills. At university level, student profiles vary

more widely, though the majority have typically completed some form of VET education prior to entry.

Food Technician programme teachers hold university degrees in food technology, nutrition, chemistry, biology, or related scientific fields. Trainers for the Cook in Hospitality Facility programme are chefs or professionals from the hospitality and food sector with practical experience. Gastronomy degree lecturers are university professors with academic and industry collaboration backgrounds. Teaching qualifications are required in the Food Technician and Gastronomy programmes; pedagogical training is formal. Familiarity with food safety and allergen regulations is reported as moderate for adult training and high for the university programme. Training on special diets and allergens is reported as not provided (adult training) or ad hoc (degree programme). Continuous professional development is occasional across all programmes.

#### **2.2.4 Gaps Identified (North Macedonia)**

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- Food labelling and consumer information is not covered at any level in the Food Technician programme or the adult training programme
- Allergen management is only at basic theoretical awareness level across all programmes; no applied or assessed coverage is reported at VET level
- Sustainable cooking practices are not covered in the Food Technician programme
- Digital and e-learning tools are minimally used (rated 1–2) across VET and adult training programmes
- No official teaching materials exist for the Food and Nutrition and Dietetics subjects in the Food Technician programme; teachers are required to create their own resources, representing a significant structural gap
- Simulation, role-play, and service-oriented scenarios are minimally used in most programmes

#### **2.2.5 Strengths Identified (North Macedonia)**

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- The adult training programme (Cook in Hospitality Facility) already includes practical applied modules on vegetarian, vegan, dietary, and gluten-free cuisine — the most advanced dietary inclusivity content in the national VET system
- The Gastronomy Bachelor programme offers applied coverage of cultural and dietary diversity, international culinary standards, and nutrition
- Work-based learning and hands-on kitchen practice are widely used in both the Food Technician and adult training programmes
- Assessment practices are comprehensive at the Food Technician and Gastronomy levels, including practical exams, continuous assessment, written/oral exams, and workplace-based assessment

- Teachers in VET programmes hold university-level qualifications in relevant fields, providing a strong academic foundation

### 2.2.6 Insights from Focus Group Consultations in National Landscape Analysis

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The focus group for North Macedonia was held in December 2025. It brought together twelve participants.

Expert perceptions and key challenges identified:

The main weakness of the current educational curriculum, as identified by participants, is that culinary inclusivity is not sufficiently integrated into educational materials. Teachers emphasised the lack of teaching materials and curricula addressing this topic, as well as the need for more practical application. No dedicated training programme specifically designed for dietary needs exists within the VET system. However, experts believe that 15 to 20 hours in the curriculum, allocated for both theoretical and practical teaching, would be sufficient to cover dietary inclusivity topics.

A critical structural constraint was identified: all formal educational programmes are already defined and cannot be changed unilaterally by teachers or institutions. Any proposed integration of dietary inclusivity content into existing formal programmes would need to be proposed to the Centre for Vocational Education in North Macedonia for approval and validation. Participants were not familiar with specific legal or regulatory requirements relating to dietary inclusivity in VET content.

Preferred training methodologies:

Practical demonstrations were identified as the most effective methodology for teaching dietary inclusivity, as students typically learn best through practical exercises and real-world applications. Case-based learning was also consistently identified as an effective approach. Practical demonstrations, case studies, and hands-on learning are considered the most effective methodologies particularly for teaching dietary inclusivity in a culinary context.

Integration recommendations and institutional requirements:

The most feasible integration pathway identified by experts was to add topics such as plant-based food technology in the elective subject Dietetics, given that this would not require full curriculum modification. Participants recommended developing and integrating teaching materials focused on dietary inclusivity — especially relating to allergens, plant-based diets, and special dietary needs — into existing VET programmes. Providing professional development for trainers through specialised workshops and training sessions was also recommended. Increasing the use of practical demonstrations, case studies, and hands-on learning experiences to engage students was considered a priority. Any proposed changes must adhere to the regulatory framework of the Centre for Vocational Education in North Macedonia.

## 2.3 TÜRKİYE

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### 2.3.1 Overview of VET Provision

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The national training landscape report for Türkiye identifies two main VET pathways and one higher education programme in the culinary field:

- Upper Secondary Vocational Education (Vocational and Technical Anatolian High School – Food and Beverage Services Field) – EQF Level 4, 4 years, operated under the Ministry of National Education (MoNE)
- Food and Beverage Services Vocational Training Programme at Vocational Training Centres (MESEM) – EQF Level 4, 4 years, apprenticeship-based dual system under MoNE, also open to adult learners
- Gastronomy and Culinary Arts Bachelor's Degree – EQF Level 6, 4 years, delivered by public and private universities under the Council of Higher Education (YÖK)

The narrative report from Türkiye provides detailed structural information about each pathway. The Food and Beverage Services framework curriculum of Vocational and Technical Anatolian High Schools aims to prepare students aged 14 to 18 for the food and beverage industry by equipping them with foundational knowledge, practical skills, and competencies aligned with national and international standards. The curriculum is developed based on national legislation (Turkish Food Codex, HACCP, ISO standards) and international frameworks including the European Qualifications Framework. Students graduating from this field are eligible to receive additional university entrance points when applying to associate degree programmes in areas such as Culinary Arts, Catering Services, Food Technology, Healthcare Tourism Management, and Tourism and Hotel Management.

### 2.3.2 Content Coverage

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Upper Secondary VET – Food and Beverage Services (EQF 4):

Training in this pathway is competence-based and modular, aligned with national occupational standards and defined by MoNE. The curriculum covers four main components: Hygiene and Sanitation (covering international standards including HACCP and ISO 22000, with a focus on food, personal, and workspace hygiene); Nutrition Principles (introducing food groups, portion control, and basic nutritional knowledge); Practical Food Production (including preparation techniques for soups, garnishes, Turkish and international dishes, and basic pastry); and Elective Courses (options such as Dietetics, Fusion Cuisine, and Ottoman Palace Cuisine, which aim to broaden culinary knowledge but are not mandatory). Food safety, hygiene, and sanitation are compulsory integrated components. Specialised topics such as special diets, sustainability, or health-oriented culinary approaches are not

systematically included as structured curriculum components and may only be encountered indirectly through workplace exposure.

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills           |             |                     | ✓                   | ✓                   |
| Food safety and hygiene           |             |                     | ✓                   | ✓                   |
| Nutrition basics                  |             |                     | ✓                   | ✓                   |
| Special diets (vegan/vegetarian)  | ✓           |                     |                     |                     |
| Food allergies and intolerances   | ✓           |                     |                     |                     |
| Sustainable cooking practices     | ✓           |                     |                     |                     |
| European/international standards  | ✓           |                     |                     |                     |
| Food Labelling and Consumer Info  | ✓           |                     |                     |                     |
| Cultural and Dietary Diversity    | ✓           |                     |                     |                     |
| Health-Oriented Cooking Practices | ✓           |                     |                     |                     |

MESEM – Vocational Training Centre (EQF 4, dual system):

The MESEM system operates under a dual structure combining one day per week of school-based theoretical instruction with four days of workplace-based practical training. The

programme covers cookery, pastry and dessert production, bakery, service, and canteen management. Strong emphasis is placed on food safety and hygiene. Basic nutrition knowledge supports practical applications. Specialised topics such as special diets, sustainability, or health-oriented approaches are not structured as standalone learning areas but may be encountered indirectly through workplace practice.

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills           |             |                     | ✓                   | ✓                   |
| Food safety and hygiene           |             |                     | ✓                   | ✓                   |
| Nutrition basics                  |             | ✓                   | ✓                   | ✓                   |
| Special diets (vegan/vegetarian)  | ✓           |                     |                     |                     |
| Food allergies and intolerances   | ✓           |                     |                     |                     |
| Sustainable cooking practices     | ✓           |                     |                     |                     |
| European/international standards  | ✓           |                     |                     |                     |
| Food Labelling and Consumer Info  | ✓           |                     |                     |                     |
| Cultural and Dietary Diversity    | ✓           |                     |                     |                     |
| Health-Oriented Cooking Practices | ✓           |                     |                     |                     |

#### Gastronomy and Culinary Arts Bachelor's Degree (EQF 6):

The Gastronomy and Culinary Arts undergraduate programme at Turkish universities is designed to provide students with comprehensive theoretical and practical training. The curriculum is structured across four years. Years 1–2 focus on foundational knowledge including nutrition, food safety, and basic culinary techniques, delivered through courses such as Introduction to Gastronomy and Basic Kitchen Practices. Years 3–4 include advanced and specialised training through courses such as Turkish Culinary Practices, World Cuisine, Sustainable Gastronomy, Gastronomy in Media, Kitchen Management, and Food and Beverage Cost Control. Students are expected to adapt recipes to diverse dietary needs with an emphasis on inclusivity and creativity. In their final year, students engage in project-based learning focused on real-world gastronomic challenges. Elective opportunities include Emerging Trends in Nutrition (exploring gluten-free and vegan cooking), Food Technology and Safety, Regional Cuisines, Fermented Beverages, Digital Media in Gastronomy, and Turkish Food Preservation Methods. Students must accumulate a minimum of 240 ECTS credits and maintain a minimum GPA of 2.00 out of 4.00 for graduation.

| Subject Area                     | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills          |             |                     | ✓                   | ✓                   |
| Food safety and hygiene          |             | ✓                   | ✓                   | ✓                   |
| Nutrition basics                 |             | ✓                   | ✓                   | ✓                   |
| Special diets (vegan/vegetarian) |             | ✓                   | ✓                   | ✓                   |
| Food allergies and intolerances  |             | ✓                   |                     | ✓                   |
| Sustainable cooking practices    |             | ✓                   |                     | ✓                   |
| European/international standards |             | ✓                   | ✓                   | ✓                   |
| Food Labelling and Consumer Info |             | ✓                   |                     | ✓                   |

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| Cultural and Dietary Diversity    |             | ✓                   | ✓                   | ✓                   |
| Health-Oriented Cooking Practices |             | ✓                   | ✓                   | ✓                   |

### 2.3.3 Learner and Trainer Profile

The upper secondary VET programme primarily caters to students aged 14 to 18. Graduates are expected to enter the workforce as mid-level professionals or pursue further education in culinary arts or related fields. The MESEM dual system is open not only to young learners but also to adult learners, in line with lifelong learning principles. The university-level programme targets students who have completed secondary education and entered through the national university entrance examination system, typically aged 18 and above.

Upper secondary VET teachers hold higher education qualifications and formal pedagogical training as required by MoNE. Workplace trainers (usta öğretici/master trainers) are experienced sector professionals; their usta öğretici certification is generally required but full pedagogical training is not. At higher education level, academic staff hold at least a Master's degree and often a PhD. Familiarity with food safety and allergen regulations is reported as high across all pathways. Training on special diets and allergens is described as ad hoc at VET level and as included in relevant courses at higher education level. Continuous professional development is occasional at VET level and regular at higher education level.

### 2.3.4 Gaps Identified (Türkiye)

- Special diets, allergen management, sustainable cooking, food labelling, cultural and dietary diversity, and health-oriented cooking practices are entirely absent from both upper secondary VET pathways

- Neither high school nor university programmes dedicate a mandatory course specifically focused on dietary inclusivity; current content on inclusivity is often optional, provided through elective courses rather than mandatory modules
- The highly centralised MoNE curriculum framework limits flexibility for integrating new content areas at VET level
- Allergen management and digital tools for education are not integrated into the core VET curriculum; elective courses addressing inclusivity topics are optional and not systematically incorporated
- Many VET high school trainers lack specific expertise in dietary inclusivity and plant-based cooking; professional development opportunities in these areas remain scarce
- Digital and e-learning tools are minimally used in both VET pathways (rated 1–2 out of 5); the curriculum lacks significant emphasis on e-learning platforms or gamified tools

### 2.3.5 Strengths Identified (Türkiye)

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- Strong, well-established culture of practice-based learning in both VET pathways, with hands-on kitchen practice and work-based learning widely implemented
- Food safety and hygiene are compulsory, applied, and formally assessed in both VET programmes; HACCP and ISO 22000 standards are embedded in the curriculum
- The MESEM dual system provides extensive workplace-based training (four days per week), enabling strong occupational competence development
- Higher education programmes systematically address special diets, cultural diversity, and health-oriented cooking, and include dedicated courses such as Sustainable Gastronomy and Emerging Trends in Nutrition
- University programmes include industry internships and project-based learning in the final year, providing real-world exposure
- Students graduating from VET receive additional university entrance points, supporting progression pathways
- Comprehensive assessment practices at all levels, including practical exams, continuous assessment, and workplace-based evaluation

### 2.3.6 Insights from Focus Group Consultations in National Landscape Analysis

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The focus group for Türkiye was organised by GOI with eight participants who are highly qualified and experienced educators specialising in food technology, culinary arts, and gastronomy. All participants are employed in vocational and technical high schools affiliated with MoNE. Academically, participants hold undergraduate degrees in Gastronomy, Culinary Arts, Food Technology, and Food Engineering, with a significant number having pursued postgraduate studies including Master's and doctoral degrees. Individual consultations were

held with each educator before the formal FGM, and a structured survey was disseminated to collect insights on perceptions, challenges, and existing practices.

Expert perceptions and key challenges identified:

The focus group identified the absence of mandatory content on dietary inclusivity and the reliance on outdated training methods as major barriers to meeting the needs of the modern foodservice industry. Trainers often lack both the expertise and resources needed to effectively teach dietary-specific culinary skills. The highly centralised curriculum system, while ensuring consistency and quality assurance, limits flexibility for integrating new content at VET level. Experts also flagged the underutilisation of digital and innovative tools as a barrier, noting that the lack of integration of e-learning platforms, gamified educational tools, or AR/VR simulations limits opportunities for students to engage with modern, interactive training methods.

Preferred training methodologies:

Experts emphasised the effectiveness of case-based learning, particularly for exposing students to real-world scenarios such as creating allergen-free menus or managing dietary needs for events. Examples cited included adapting traditional Turkish dishes for gluten-free diets or designing plant-based versions of classic recipes for sustainability-focused menus. Practical demonstrations in professional kitchens were identified as a cornerstone of effective learning, with supervised workshops that simulate real-world challenges — such as preparing meals for diverse dietary preferences in a hotel kitchen — considered essential. Digital tools and gamified learning were recognised as relevant and growing in importance; suggested applications include nutritional databases, allergen tracking apps, and augmented reality tools for interactive learning. Peer collaboration and mentorship programmes with industry professionals were also recommended.

Integration recommendations and institutional requirements:

Experts advocated for the creation of dedicated modular content focused on allergen management and labelling, sustainable cooking practices emphasising plant-based and waste-free approaches, and dietary adaptations for chronic conditions such as diabetes, celiac disease, and lactose intolerance. Upskilling trainers was identified as a priority, including through workshops led by nutritionists and dietary inclusivity specialists and through access to international certifications such as HACCP and plant-based culinary courses. Collaboration with global institutions such as Le Cordon Bleu and Escoffier was recommended to facilitate knowledge exchange and training.

Experts recommended enhancing practical training through advanced kitchen laboratories equipped for dietary-specific practices, such as stations for gluten-free baking, plant-based protein preparation, and allergen-safe cooking. Industry partnerships with hotels, restaurants, and catering companies that prioritise dietary inclusivity were recommended to offer internships and real-world insights. Digital literacy integration through recipe

modification tools, online simulations for menu planning, and augmented reality for kitchen safety training was also highlighted.

Regulatory context and policy advocacy:

Experts stressed the need for strict adherence to the Turkish Food Codex and international frameworks such as HACCP and ISO 22000 as foundational to all dietary inclusivity training. The European Green Deal and sustainability directives were highlighted as key international influences. At policy level, experts recommended lobbying for curriculum updates through collaboration with MoNE to ensure dietary inclusivity becomes a mandated component of VET programmes. Creating standardised evaluation frameworks aligned with both national and international food safety and sustainability goals was recommended. Developing specialised certifications endorsed by national educational authorities and international bodies (including EQF alignment) was also proposed as a means of formalising dietary inclusivity training.

## 2.4 SPAIN

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### 2.4.1 Overview of VET Provision

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The national training landscape report for Spain identifies three distinct training pathways:

- Certificates of Professionalism in Hospitality (e.g. Cooking, Basic Kitchen Operations, Restaurant Services) – EQF Levels 1–3, 300–800 hours, delivered through accredited training centres under the State Public Employment Service (SEPE), primarily targeting unemployed adults
- Intermediate and Higher Vocational Education Programmes in Hospitality and Tourism (e.g. Cooking and Gastronomy, Kitchen Management, Restaurant Services) – EQF Level 4 (Intermediate VET) and Level 5 (Higher VET), approximately 2,000 hours including workplace training, delivered by public and private VET centres
- Bachelor's Degree in Gastronomy / Culinary Arts – EQF Level 6, 4 years (240 ECTS), delivered by public and private universities including specialised culinary faculties

### 2.4.2 Content Coverage

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Certificates of Professionalism (EQF 1–3):

Training is strongly oriented toward rapid labour market integration, focusing on practical skills required for immediate employment. Food safety and hygiene are mandatory and strictly assessed. Broader topics such as nutrition, sustainability, special diets, and allergen management are not systematically included and depend on the specific training programme or provider.

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills           |             |                     | ✓                   | ✓                   |
| Food safety and hygiene           |             |                     | ✓                   | ✓                   |
| Nutrition basics                  | ✓           |                     |                     |                     |
| Special diets (vegan/vegetarian)  | ✓           |                     |                     |                     |
| Food allergies and intolerances   | ✓           |                     |                     |                     |
| Sustainable cooking practices     | ✓           |                     |                     |                     |
| European/international standards  | ✓           |                     |                     |                     |
| Food Labelling and Consumer Info  | ✓           |                     |                     |                     |
| Cultural and Dietary Diversity    | ✓           |                     |                     |                     |
| Health-Oriented Cooking Practices | ✓           |                     |                     |                     |

#### Intermediate and Higher VET Programmes (EQF 4–5):

VET programmes in hospitality and tourism in Spain are structured under a competence-based modular system aligned with the National Catalogue of Professional Qualifications. Core content focuses on culinary techniques, food preparation, service operations, and food safety and hygiene, which are compulsory and strictly regulated. Nutrition is introduced mainly as supporting knowledge. Work-based learning (Formación en Centros de Trabajo – FCT) is a mandatory component. Allergen management, special diets, sustainability, and

inclusive culinary practices are not systematically integrated into the curriculum and are typically addressed only superficially or indirectly.

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills           |             |                     | ✓                   | ✓                   |
| Food safety and hygiene           |             |                     | ✓                   | ✓                   |
| Nutrition basics                  |             | ✓                   | ✓                   | ✓                   |
| Special diets (vegan/vegetarian)  | ✓           |                     |                     |                     |
| Food allergies and intolerances   | ✓           |                     |                     |                     |
| Sustainable cooking practices     | ✓           |                     |                     |                     |
| European/international standards  |             | ✓                   | ✓                   | ✓                   |
| Food Labelling and Consumer Info  | ✓           |                     |                     |                     |
| Cultural and Dietary Diversity    | ✓           |                     |                     |                     |
| Health-Oriented Cooking Practices | ✓           |                     |                     |                     |

#### Bachelor's Degree in Gastronomy (EQF 6):

Higher education programmes in gastronomy in Spain offer a comprehensive and interdisciplinary approach integrating culinary practice with scientific, cultural, and

managerial perspectives. Nutrition, special diets, and allergen management are more systematically addressed than in VET programmes, often through dedicated courses or integrated modules. Sustainability, cultural diversity, and international culinary standards are also incorporated, reflecting current trends in the global food sector.

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills           |             |                     | ✓                   | ✓                   |
| Food safety and hygiene           |             | ✓                   | ✓                   | ✓                   |
| Nutrition basics                  |             | ✓                   | ✓                   | ✓                   |
| Special diets (vegan/vegetarian)  |             | ✓                   | ✓                   | ✓                   |
| Food allergies and intolerances   |             | ✓                   | ✓                   | ✓                   |
| Sustainable cooking practices     |             | ✓                   | ✓                   | ✓                   |
| European/international standards  |             | ✓                   | ✓                   | ✓                   |
| Food Labelling and Consumer Info  |             | ✓                   |                     | ✓                   |
| Cultural and Dietary Diversity    |             | ✓                   | ✓                   | ✓                   |
| Health-Oriented Cooking Practices |             | ✓                   | ✓                   | ✓                   |

### 2.4.3 Learner and Trainer Profile

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Spain's culinary VET programmes attract a demographically diverse learner group. The primary age range is 18 to 35, including recent secondary school graduates and young adults seeking to upgrade skills. A notable group consists of mature students in career transition, motivated by personal interest or the need to adapt to labour market demands. Most students have completed compulsory secondary education. A significant subset have previous qualifications in related areas such as hospitality, catering, or nutrition. Learner motivations are varied: career advancement, niche market specialisation (including plant-based cuisine, molecular cuisine, or menu management for people with special dietary needs), and interest in sustainability and innovation in culinary arts. This diversity in learner profiles enriches the learning environment and points to growing interest in dietary inclusivity topics.

Trainers for Certificates of Professionalism typically hold vocational qualifications or higher education degrees in hospitality or related fields, combined with professional certification linked to the National Catalogue. Teaching qualifications are required, and pedagogical training is both formal and informal. At VET level, trainers hold university degrees or higher VET qualifications in hospitality plus pedagogical certification, and combine teaching with prior professional experience. At higher education level, academic staff typically hold Master's or PhD qualifications and have regular continuing professional development. Training on special diets and allergens is ad hoc at VET level and systematically included at higher education level.

### 2.4.4 Gaps Identified (Spain)

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- Allergen management, special diets, sustainability, cultural dietary diversity, and health-oriented cooking are entirely absent from Certificates of Professionalism and are not systematically integrated into Intermediate or Higher VET programmes
- Food labelling and consumer information is not covered in Certificates of Professionalism or Intermediate/Higher VET programmes
- Limited content on emerging dietary trends and cultural inclusion in standard VET programmes, including halal and kosher dietary practices
- Insufficient integration of digital tools; despite available technologies, culinary VET programmes have not fully integrated digital tools into their curriculum
- Gaps in trainer training for modern dietary practices including allergen management and specialised diets
- Digital and e-learning tools are minimally used in VET and employment training pathways (rated 1–2 out of 5)

#### 2.4.5 Strengths Identified (Spain)

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- The Bachelor's Degree in Gastronomy provides comprehensive and formally assessed coverage of special diets, allergens, sustainability, cultural diversity, and health-oriented cooking
- Work-based learning (FCT) is a mandatory and well-established component of Intermediate and Higher VET programmes, ensuring real professional exposure
- Food safety and hygiene are compulsory and strictly assessed across all pathways, with alignment to EU Regulation 1169/2011
- Programmes are designed to comply with EU food safety regulations, ensuring students understand legal frameworks for allergen management and labelling
- There is a growing focus on sustainable culinary practices and the inclusion of plant-based diets in more advanced programmes
- Trainer profiles are strong at VET and higher education levels, combining practical industry experience with formal teaching qualifications

#### 2.4.6 Insights from Focus Group Consultations in National Landscape Analysis

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The focus group for Spain was conducted in December (a structured hybrid FGM). narrative focus group brought together eleven participants. All participants had more than ten years of professional experience. The focus group was conducted in a hybrid format and interviewed by Javier Campos.

Expert perceptions and key challenges identified:

Experts identified that culinary VET programmes in Spain have a solid practical foundation and a growing commitment to sustainability, but must evolve to better integrate emerging dietary trends, cultural inclusion, and digital tools. The need to update and enrich content and methodologies related to dietary inclusivity was consistently emphasised. Improving the training of trainers and updating curriculum content were identified as crucial steps for ensuring programmes remain relevant and effective.

Preferred training methodologies:

Three methodologies were identified as most effective. Case-based learning was strongly recommended because it uses real-world scenarios to address dietary inclusivity challenges, allowing students to apply knowledge in contexts that reflect everyday professional situations — including allergen management, inclusive menu creation, and adaptation of culinary practices for different dietary needs. Practical demonstrations were identified as essential for skill mastery, particularly for allergen management and preparation of cultural cuisines; live demonstrations allow students to observe crucial techniques and then practise under expert supervision. Digital resources, including online learning platforms, interactive simulations, and mobile applications, were recommended to improve engagement and accessibility of learning.

#### Integration recommendations:

Three integration strategies were proposed. Blended learning was recommended as combining online resources with hands-on workshops — online modules for videos, interactive quizzes, and readings on dietary inclusivity combined with face-to-face workshops for applying and practising skills. Progressive content integration was recommended: introducing dietary inclusivity in foundational modules first (basic allergen management, nutrition, and sustainability concepts) and progressively moving towards specialised topics such as gluten-free meal preparation, culturally specific diets, and advanced culinary techniques. Interdisciplinary collaboration involving nutritionists, food technologists, and cultural experts in curriculum design was specifically recommended, including forming interdisciplinary committees and inviting experts to lead workshops and seminars.

#### Regulatory context:

Experts identified compliance with EU food safety regulations — particularly EU Regulation 1169/2011 on allergen labelling and EU hygiene standards — as critical. Alignment with the European Green Pact was highlighted, including principles of reducing food waste and promoting plant-based diets. Experts recommended standardisation of dietary inclusivity modules across all culinary VET programmes, continuous curriculum updates to reflect latest research and practices, and ongoing specialised training for trainers. Developing and standardising specific modules on dietary inclusivity in all culinary VET programmes was identified as a priority to ensure all students receive uniform and comprehensive training.

## 2.5 GREECE

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### 2.5.1 Overview of VET Provision

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The national training landscape report for Greece identifies three types of culinary and food-related training:

- Vocational Upper Secondary School (EPAL) – Food and Beverage Technology Technician – EQF Level 4 (or Level 5 with one post-secondary apprenticeship year), 3 or 4 years, provided by the Greek Ministry of Education, Religious Affairs and Sports
- Vocational Apprenticeship Schools (EPAS/PEPAS) and Vocational Training School (ESK) – EQF Level 3, 2 years (4 semesters), specialisations including Bakery–Confectionery, Culinary Arts, and Dairy, provided by DYPA (Greek Public Employment Service) and the Ministry of Education
- Higher Vocational Training Schools (SAEK) – EQF Level 5, 2.5 years (5 semesters), specialisations including Culinary Art Technician–Chef, Bakery–Confectionery

Technician, Nutrition and Dietetics Executive, provided by DYPA, the Ministry of Education, and private schools

The national narrative report shows that culinary schools and VET institutions, both public and private, do not offer any module on dietary restrictions as part of their standard culinary curriculum. Topics such as food allergies, basic vegetarian and vegan cooking, and gluten-free meal preparation are absent from the regular provision. Specialist dietary content is available through private culinary schools and academies, which frequently organise workshops on plant-based cooking, gluten-free baking, and allergen-free meal preparation — but these involve an extra cost for the trainee and are typically short-term courses lasting a few days to a few weeks. Culinary associations and professional organisations occasionally host continuing education workshops for current industry professionals, but these also involve payment and are not integrated into the formal VET system. Universities and higher education institutions offering degrees in nutrition and dietetics include modules on dietary restrictions, but these are primarily aimed at dietitians rather than chefs and focus more on theoretical knowledge than practical cooking skills.

## 2.5.2 Content Coverage

EPAL – Food and Beverage Technology Technician (EQF 4/5):

In the EPAL programme, food safety and hygiene are systematically covered through theoretical instruction and laboratory practice, focusing on HACCP principles, contamination prevention, and sanitary procedures. Sustainable cooking practices are introduced through topics on resource use, waste reduction, seasonal ingredients, and environmentally responsible processing methods. Food labelling and consumer information are taught through analysis of legal requirements, nutritional declarations, allergens, and product traceability. General culinary skills, nutrition basics, special diets, and health-oriented cooking are not covered in this programme.

| Subject Area            | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills | ✓           |                     |                     |                     |

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| Food safety and hygiene           |             | ✓                   | ✓                   | ✓                   |
| Nutrition basics                  | ✓           |                     |                     |                     |
| Special diets (vegan/vegetarian)  | ✓           |                     |                     |                     |
| Food allergies and intolerances   | ✓           |                     |                     |                     |
| Sustainable cooking practices     |             | ✓                   | ✓                   | ✓                   |
| European/international standards  | ✓           |                     |                     |                     |
| Food Labelling and Consumer Info  |             | ✓                   | ✓                   | ✓                   |
| Cultural and Dietary Diversity    |             |                     |                     |                     |
| Health-Oriented Cooking Practices | ✓           |                     |                     |                     |

#### EPAS/PEPAS/ESK – Apprenticeship Schools (EQF 3):

The curriculum integrates core culinary competencies through a balanced combination of theory and practice. General culinary skills are developed via laboratory-based training and professional modules. Food safety and hygiene are systematically taught. Nutrition basics are introduced to support menu planning. European and international culinary terminology and practices are also incorporated. Special diets, allergens, sustainable cooking, food labelling, cultural diversity, and health-oriented cooking are not covered.

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills           |             | ✓                   | ✓                   | ✓                   |
| Food safety and hygiene           |             | ✓                   | ✓                   | ✓                   |
| Nutrition basics                  |             | ✓                   | ✓                   | ✓                   |
| Special diets (vegan/vegetarian)  | ✓           |                     |                     |                     |
| Food allergies and intolerances   | ✓           |                     |                     |                     |
| Sustainable cooking practices     | ✓           |                     |                     |                     |
| European/international standards  |             | ✓                   | ✓                   | ✓                   |
| Food Labelling and Consumer Info  | ✓           |                     |                     |                     |
| Cultural and Dietary Diversity    | ✓           |                     |                     |                     |
| Health-Oriented Cooking Practices | ✓           |                     |                     |                     |

#### SAEK – Higher Vocational Training Schools (EQF 5):

The SAEK programme develops comprehensive culinary and professional competencies integrating theory and practice. General culinary skills, food safety and hygiene, nutrition basics, and European and international culinary standards are covered at applied and

assessed level. Special diets (vegan/vegetarian) are covered at basic theoretical awareness level. Health-oriented cooking practices are covered at basic level. Allergen management, sustainable cooking, food labelling, cultural diversity, and certain areas of health-oriented cooking are not covered.

| Subject Area                      | Not Covered | Basic (Theoretical) | Applied (Practical) | Assessed (Formally) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|
| General culinary skills           |             | ✓                   | ✓                   | ✓                   |
| Food safety and hygiene           |             | ✓                   | ✓                   | ✓                   |
| Nutrition basics                  |             | ✓                   | ✓                   | ✓                   |
| Special diets (vegan/vegetarian)  |             | ✓                   |                     |                     |
| Food allergies and intolerances   | ✓           |                     |                     |                     |
| Sustainable cooking practices     | ✓           |                     |                     |                     |
| European/international standards  |             | ✓                   | ✓                   | ✓                   |
| Food Labelling and Consumer Info  | ✓           |                     |                     |                     |
| Cultural and Dietary Diversity    | ✓           |                     |                     |                     |
| Health-Oriented Cooking Practices |             | ✓                   |                     |                     |

### 2.5.3 Learner and Trainer Profile

The largest demographic group in Greek culinary VET programmes consists of young adults aged 18 to 25 — mostly high school graduates seeking specialised training as a direct route into employment, with minimal or no prior work experience. A considerable number of

trainees are adults aged 25 to 40 seeking career changes, often with prior vocational training in related fields such as tourism and hospitality, or with previous work experience in related sectors who are seeking a new professional direction. The narrative report notes that part-time and evening courses on special diets are available for working professionals, often lasting 6 to 12 months, meeting 2 to 3 times per week for 2 to 4 hours per session — though these are not part of the standard formal VET curriculum.

Across Greek programmes, teachers may hold either a higher education degree or compulsory education combined with professional experience, depending on the subject they teach. Formal pedagogical training is required for permanent/educational staff; industry-based instructors may not have pedagogical training. Familiarity with food safety and allergen regulations is reported as high for EPAL staff and moderate for EPAS/PEPAS/ESK and SAEK staff. Training on special diets and allergens is reported as not provided (EPAL) or ad hoc (EPAS and SAEK). Continuous professional development is occasional across all Greek programmes.

#### **2.5.4 Gaps Identified (Greece)**

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- Culinary schools and VET institutions, both public and private, do not offer any module on dietary restrictions as part of their standard culinary curriculum
- Special diets and allergen management are not covered in EPAL, not covered in EPAS/ESK, and covered only at basic level in SAEK
- Sustainable cooking is not covered in EPAS/ESK or SAEK programmes
- Cultural and dietary diversity, food labelling, and health-oriented cooking are not covered in EPAS/ESK and SAEK programmes
- Trainees do not spend effective time in kitchen labs due to insufficient budget for essential cooking materials and ingredients — a structural constraint that directly limits practical learning
- Limited opportunities for students to engage in internships or collaborations with restaurants specialising in dietary-inclusive cuisine
- The EPAL programme does not cover general culinary skills or nutrition basics, limiting its direct relevance for FOOD4ALL culinary integration
- Specialist dietary content is only available through private schools at extra cost, creating inequitable access to dietary inclusivity training

#### **2.5.5 Strengths Identified (Greece)**

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- The EPAL programme provides systematic applied and assessed coverage of food safety, sustainable cooking, and food labelling — areas that complement FOOD4ALL content
- Work-based learning (apprenticeship) is a core and well-established component of all Greek programmes
- Greek VET programmes emphasise the use of fresh, local, and seasonal ingredients rooted in traditional Greek and Mediterranean cooking principles — providing a powerful base for health-conscious, balanced eating
- All VET programmes include a basic understanding of nutrition, helping students learn about food groups, macronutrients, and dietary needs
- There is a strong focus on food safety, including HACCP certifications, ensuring trainees understand essential practices for handling food allergens and preventing cross-contamination
- The SAEK programme begins to introduce special diets at an awareness level, creating a foundation for further FOOD4ALL content integration
- Digital and e-learning tools are already used at a moderate level (rated 4 out of 5) in both EPAS and SAEK programmes

### 2.5.6 Insights from Focus Group Consultations in National Landscape Analysis

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The focus group for Greece was organised with nine participants, divided into three sub-groups of three participants each according to their professional sector. Sub-group 1 consisted of the managing team of the Western Greece District of the Hellenic Food Authority (EFET). This meeting was held in person at EFET premises in Patras. Sub-group 2 consisted of three trainers in the School of Culinary Arts at the Public School of Advanced Vocational Training (DSAEK) in Patras. All participants submitted completed questionnaires before the online meeting.

Expert perceptions and key challenges identified:

The most effective training methods for teaching culinary inclusivity to VET students in Greece are identified as those that integrate hands-on learning, real-world applications, interactive tools, and theoretical knowledge. Culinary skills are considered best learned through demonstrations, case-based learning, simulations, role-playing, guest lectures, and industry partnerships. Theoretical knowledge can be taught in class or through digital modules and online tools. The narrative report confirmed that trainees have limited time in kitchen labs due to insufficient funds for necessary cooking materials and ingredients, and that the curriculum does not provide any overview focused on practical skills required for special diets such as gluten-free, vegan, keto, and allergen-free. Opportunities for internships or collaborations with restaurants focusing on dietary-inclusive cuisine are also limited.

Integration recommendations and institutional requirements:

Experts recommended a structured approach that balances theoretical knowledge, practical application, and industry relevance. The recommended steps were: (1) develop a dedicated module or unit specifically focused on dietary inclusivity, integrated into the core culinary curriculum; (2) offer hands-on workshops and practical demonstrations centred on dietary inclusivity; (3) establish partnerships with local restaurants, health professionals, and food industry experts to create industry-aligned content and internship opportunities; and (4) incorporate e-learning modules, digital platforms, and apps into the curriculum focused on dietary inclusivity. Experts recommended integrating dietary inclusivity modules into the standard curriculum of both public and private VET schools, encompassing both theoretical lessons and practical sessions. They also recommended embedding EU Green Deal and Farm to Fork Strategy principles into VET programmes with regular updates and monitoring, and establishing partnerships with key industry players including restaurants, caterers, and food safety organisations to ensure training aligns with industry needs.

#### Trainer upskilling needs:

Experts identified the following priority areas for trainer upskilling: specialised courses on identifying common allergens, implementing allergen-free meal preparation, and preventing cross-contact, in addition to HACCP certification; courses covering fundamentals of nutrition, macronutrients, dietary requirements of different populations, use of plant-based proteins, dairy alternatives, vegan and gluten-free baking, and specific dietary needs such as celiac disease or intolerances — offered by Greek dietetics associations or online platforms; and workshops on current food trends and food innovation and sustainability, including plant-based eating, sustainability, fermented foods, zero-waste cooking, plant-forward cuisine, and sustainable sourcing.

#### Suggested content updates for alignment with European standards and sustainability principles:

To align VET programmes in Greece with European standards and sustainability principles, experts recommended enriching the curriculum with mandatory modules on food allergens, cross-contamination prevention, and EU allergen labelling regulations. Practical training on food handling protocols for allergen-free cooking, including using separate utensils, equipment, and preparation areas to avoid cross-contamination, should be provided. Trainees should be encouraged to design seasonal, plant-based menus, reduce food waste, and use local, organic ingredients in order to embed EU Green Deal and Farm to Fork Strategy principles. Developing specialised training modules focused on the preparation of gluten-free, vegan, low-sodium, and other health-conscious menus, and establishing partnerships with key industry players including restaurants, caterers, and food safety organisations, was recommended. A regular review and update of the VET curriculum was also called for to reflect changes in EU regulations, new trends in dietary inclusivity, and innovations in sustainable culinary practices.

#### Regulatory context:

The relevant national and European regulatory requirements identified by experts as influencing VET content in Greece include: EU Regulation (EU) No. 1169/2011 on the Provision of Food Information to Consumers; Regulation (EC) No. 1924/2006 of the European Parliament on health claims; Hazard Analysis and Critical Control Points (HACCP); the Greek Food and Drinks Code (KTP); Greek Law 4235/2014 for the Fields of Food, Feed, Animal Health and Welfare; and oversight by the Hellenic Food Authority (EFET) ensuring compliance with EU food hygiene regulations (Regulation No. 852/2004). Experts also highlighted partnership with dietitians as a means of integrating nutritional science into menu planning.

## 2.6 COMPARATIVE CROSS-COUNTRY SYNTHESIS

### 2.6.1 EQF Level Coverage Across Partner Countries

The five partner countries collectively cover a wide range of EQF levels in culinary VET provision, from EQF Level 1 (Spain – Certificates of Professionalism) to EQF Level 6 (all five countries offer bachelor-level programmes in gastronomy or related fields). The distribution demonstrates that FOOD4ALL integration opportunities exist at multiple qualification levels across all partner systems.

| Country         | EQF Levels Covered in National Training Landscape Reports                                                    |
|-----------------|--------------------------------------------------------------------------------------------------------------|
| France          | EQF 3 (CAP), EQF 4 (Bac Pro), EQF 5 (BTS)                                                                    |
| North Macedonia | EQF 4 (Food Technician), EQF 5 (Cook in Hospitality Facility – adult), EQF 6 (Gastronomy degree)             |
| Türkiye         | EQF 4 (Upper Secondary VET; MESEM dual), Associate Degree in Culinary Arts (EQF 5), EQF 6 (Higher Education) |
| Spain           | EQF 1–3 (Certificates of Professionalism), EQF 4–5 (Intermediate and Higher VET), EQF 6 (Bachelor's degree)  |
| Greece          | EQF 3 (EPAS/ESK), EQF 4–5 (EPAL), EQF 5 (SAEK)                                                               |

### 2.6.2 Common Strengths Across Partner Countries

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The following strengths are consistently reported across all five partner countries and across multiple EQF levels:

- Food safety and hygiene is the most consistently covered, applied, and formally assessed subject area across all partner countries and all VET levels. HACCP is explicitly referenced in the national reports of France, Greece, Spain, and Türkiye. This universal foundation provides a reliable entry point for FOOD4ALL content integration, as allergen management and dietary safety are directly connected to this existing competence area.
- Practical, hands-on kitchen training is the dominant pedagogical methodology across all five countries. Trainer-led demonstrations and hands-on kitchen practice are rated among the most widely used methods in every national system.
- Work-based learning is a structural component of VET provision in all five countries, even if its form varies — apprenticeship-based in Türkiye and Greece; FCT in Spain; on-the-job training in France and North Macedonia.
- Comprehensive practical assessment through cooking exams, continuous practical assessment, and workplace-based evaluation is present across all systems.
- Mediterranean culinary heritage (Greece) and Turkish culinary heritage (Türkiye) provide strong foundational contexts for adapting and embedding dietary inclusivity practices within national culinary traditions.

### 2.6.3 Common Gaps Across Partner Countries

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The following gaps are observed across multiple partner countries and represent the primary integration opportunities for FOOD4ALL content:

- Allergen management and food allergy awareness: This topic is systematically absent or only at basic theoretical awareness level in the majority of VET-level programmes across all five countries. Spain (Certificates of Professionalism and Intermediate/Higher VET), Türkiye (both upper secondary VET pathways), Greece (EPAS and SAEK), and North Macedonia (Food Technician and Cook in Hospitality Facility) all report no applied or assessed coverage of this topic.
- Special diets (vegan/vegetarian): This topic is not covered or only at basic level in most VET programmes. France has partially addressed this through the 2023 CAP curriculum reform. North Macedonia includes it in the adult Cook in Hospitality Facility programme. Türkiye and Spain address it only at higher education level.
- Sustainable cooking practices: Absent from VET-level programmes in Türkiye (both pathways), Spain (Certificates and VET), and North Macedonia (Food Technician). Present in France only at theoretical awareness level and in Greece only in the EPAL programme.
- Digital and e-learning tools: Consistently reported as minimally used (rated 1–2 out of 5) in VET-level programmes across Türkiye, Spain, France (at lower levels), and North

Macedonia. Some moderate use is reported in Greek EPAS and SAEK programmes and in the French BTS.

- Cultural and dietary diversity: Absent from most VET-level programmes. Present in North Macedonia's Gastronomy degree and Türkiye's higher education programmes but largely absent at EQF 3–5 level across all countries.
- Allergen management and food allergy awareness: This topic is systematically absent or only at basic theoretical awareness level in the majority of VET-level programmes across all five countries. Spain (Certificates of Professionalism and Intermediate/Higher VET), Türkiye (both upper secondary VET pathways), Greece (EPAS and SAEK, with nothing at all in formal VET according to the national narrative report), and North Macedonia (Food Technician and Cook in Hospitality Facility) all report no applied or assessed coverage of this topic. The Greek national report explicitly confirms that culinary schools and VET institutions do not offer any module on dietary restrictions.
- Special diets (vegan/vegetarian): This topic is not covered or only at basic level in most VET programmes. France has partially addressed this through the 2023 CAP curriculum reform, though implementation is hampered by lack of trainer preparation and resources. North Macedonia includes it in the adult Cook in Hospitality Facility programme. Türkiye and Spain address it only at higher education level.
- Sustainable cooking practices: Absent from VET-level programmes in Türkiye (both pathways), Spain (Certificates and VET), and North Macedonia (Food Technician). Present in France only at theoretical awareness level and in Greece only in the EPAL programme.
- Digital and e-learning tools: Consistently reported as minimally used (rated 1–2 out of 5) in VET-level programmes across Türkiye, Spain, France (at lower levels), and North Macedonia. Some moderate use is reported in Greek EPAS and SAEK programmes and in the French BTS. Private schools in Greece also use digital tools to a limited extent.
- Cultural and dietary diversity: Absent from most VET-level programmes. Cultural dietary practices such as halal and kosher are mentioned in the Spanish narrative report but are not systematically integrated into formal VET curricula anywhere.
- Trainer expertise in dietary inclusivity: A gap identified across all five countries. In France, training on special diets and allergens is ad hoc. In Greece, trainers lack access to the latest research and innovative techniques for special diets. In Türkiye, many VET high school trainers lack specific expertise in allergen management or plant-based cooking. In Spain, gaps in trainer training for modern dietary practices are explicitly documented. In North Macedonia, teachers have no official materials for the relevant subjects.

## CHAPTER 3 – FOCUS GROUP MEETING FINDINGS FOR VET INTEGRATION FRAMEWORK

This chapter presents the findings of the Focus Group Meetings (FGMs) conducted by the FOOD4ALL project partners to support the development of the VET Integration Framework. The consultations brought together VET trainers, culinary professionals, dieticians, nutrition experts, food safety specialists, apprentices, and other relevant stakeholders to explore how inclusive dietary education can be more effectively integrated into culinary vocational education and training.

The focus groups examined current training practices, challenges related to teaching special dietary requirements, preferred learning methodologies, trainer upskilling needs, institutional requirements, and opportunities for strengthening collaboration between VET providers and industry stakeholders. Conducted between February and May 2026, the consultations generated practical insights and recommendations that informed the design of the VET Integration Framework and its proposed implementation strategies.

The findings are presented on a country-by-country basis in order to preserve the specific characteristics, priorities, and contextual realities of each national VET system. The chapter concludes with a comparative synthesis highlighting common themes, shared challenges, and cross-country recommendations emerging from the consultations.

### 3.1 FRANCE

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#### 3.1.1 FGM Background

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The French FGM was organised by Le Carburateur and conducted in two online group sessions on 29 April 2026 and 21 May 2026. A total of 8 participants took part, drawn from culinary training centres and one independent trainer. Participants were trainers working primarily in initial vocational training with learners aged 18–29, and trainers from centres specialising in vegetarian cuisine working mainly with adult learners. All participants are actively involved in training for culinary professions.

The FOOD4ALL project and platform were presented to all participants prior to the structured discussion, which followed a consistent methodology across both sessions: an introductory round, followed by sharing of experience with digital tools, and then focused exploration of integration possibilities given learner profiles and teaching methods in use.

### 3.1.2 Curriculum Alignment and Digital Readiness

| Indicator                                             | Level    |
|-------------------------------------------------------|----------|
| Overall understanding of curriculum alignment         | High     |
| Confidence in integrating digital tools and platforms | Moderate |

Overall understanding of curriculum alignment was reported as high. Confidence in integrating digital tools and platforms was reported as moderate.

Participants reported that all training programmes at initial training centres must comply with a set of core competencies for each qualification, and that digital resources can be used as a complement to these requirements. Culinary schools for adults were identified as having greater flexibility to use new digital resources. Participants found the FOOD4ALL platform very comprehensive, with relevant information and useful activities, and agreed that the platform is easy to use with a dynamic design. Participants emphasised that digital resources must be accessible directly on students' mobile phones. A further challenge is that digital resources should complement the course and cannot replace any part of the training content.

### 3.1.3 Pedagogical Approaches

The two most frequently mentioned pedagogical approaches in the French focus group were Experiential Learning and Scenario/Case-Based Learning. Participants emphasised that learning through practice is the most effective method for their learners. Trainers generally conduct demonstrations followed by hands-on practice based on reproducing the observed technical gestures. Practice is considered an essential component of the pedagogical scenario, also helping to maintain learners' attention, and further encourages collaborative work around a shared theme.

The practical kitchen context requires significant supervision as well as genuine teamwork. This approach appears particularly well suited to learners who sometimes struggle to remain focused during theoretical lessons. Practical activities mobilise theoretical knowledge — such as hygiene rules or culinary techniques — but also foster culinary creativity. Participants noted that digital resources could support flipped classroom approaches: learners could rely on platform information before engaging in practical activities and then deepen their learning in class through collective reflection on the activities carried out.

### 3.1.4 Alignment Preferences for FOOD4ALL Content

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Participants prioritised a combination of multiple alignment approaches and alignment through practical competence units linked to kitchen practice. The FOOD4ALL platform was seen as a complementary pedagogical tool available to trainers. Participants noted that the platform cannot replace face-to-face practical teaching, but that the diversity of practical case studies and the quality of modules suggest significant added value. Participants noted that most students would likely use the platform within the classroom setting and with trainer support, rather than independently. Adult learners were identified as more capable of accessing content independently.

### 3.1.5 Use of Digital Tools

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For pedagogical purposes, participants most frequently selected flexibility and accessibility, personalised learning, and interactive learning through multimedia and quizzes. Scenario-based and problem-based learning were consistently identified as the most effective methods in culinary education, as they place learners in challenging situations resembling those they will face professionally. Digital tools were also valued for use after practical activities to analyse successes and mistakes and encourage reflective practices.

For assessment, participants identified platform-integrated quizzes and short tests, project-based or practical assignments supported digitally, and digital presentation and pitching tasks as the most valuable methods. The platform was considered mainly useful for assessing theoretical competencies. Participants highlighted the low level of digital equipment in some training centres as a limitation.

The single most important support need identified was practical methodological guidance for teachers. All participants agreed that educational and methodological guidance is crucial for using digital resources, as incorporating digital tools requires changing working methods and lesson structure.

## 3.2 NORTH MACEDONIA

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### 3.2.1 FGM Background

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The North Macedonian FGM was organised and conducted in person in April 2026. A total of 11 participants took part, drawn from six secondary vocational schools across North Macedonia. All participants are VET teachers involved in food technology and culinary-related subjects.

### 3.2.2 Curriculum Alignment and Digital Readiness

| Indicator                                             | Level                               |
|-------------------------------------------------------|-------------------------------------|
| Overall understanding of curriculum alignment         | Moderate (quantitative scores: High |
| Confidence in integrating digital tools and platforms | Moderate (quantitative scores: High |

While the overall trend was classified as moderate, quantitative results revealed notably high numerical scores. The average score for understanding curriculum alignment was 4.45 out of 5; active consideration of curriculum alignment in teaching scored 4.55; and confidence in aligning new thematic or digital content with existing VET curricula also scored 4.55. Digital readiness was similarly high: familiarity with digital tools averaged 4.36, frequency of use averaged 4.55, and confidence in integrating digital tools into practical kitchen-based training reached 4.64.

#### **Main Insights**

- Participants demonstrated strong awareness of the importance of connecting learning outcomes, teaching activities, and assessment methods.
- Curriculum alignment is actively considered by most teachers when designing or delivering gastronomy VET courses.
- Teachers feel confident that new thematic content — such as special diets, allergen awareness, and inclusive culinary practices — can be linked to existing VET curricula.
- Digital tools and platforms are already familiar and regularly used, especially for preparation, explanation, reinforcement, and assessment.

#### **Key Challenges**

- Despite high confidence, practical methodological guidance is still needed on how to integrate digital tools in a structured and purposeful way.
- Digital tools must be carefully connected to practical kitchen tasks and not treated as separate or additional work.
- Differences in digital confidence and access may still exist between teachers, learners, and schools.

### 3.2.3 Pedagogical Approaches

| Approach                            | Participants | Percentage |
|-------------------------------------|--------------|------------|
| Experiential Learning               | 7            | 64%        |
| Work-Based / Situated Learning      | 6            | 55%        |
| Competence-Based Education/Training | 5            | 45%        |
| Bloom's Taxonomy                    | 5            | 45%        |
| Problem-Based Learning              | 5            | 45%        |
| Scenario-/Case-Based Learning       | 2            | 18%        |
| Flipped / Blended Learning          | 2            | 18%        |

Likert-scale responses confirmed that kitchen-based training in North Macedonian VET schools is strongly practice-oriented. Learning by doing during kitchen practice and observing demonstrations both scored an average of 4.45 out of 5. Applying feedback in subsequent kitchen tasks was the strongest element, with an average of 4.64 — the highest rating overall. Reflection on mistakes scored 4.00, indicating it is present but could be further strengthened systematically.

Participants emphasised the importance of demonstration, supervised practice, and feedback cycles. Problem-based and scenario-based elements were identified as especially relevant for FOOD4ALL topics such as adapting recipes for dietary restrictions, substituting ingredients, and responding to allergen requirements. Competence-based approaches are relevant because learners must demonstrate practical ability, not only theoretical understanding.

### 3.2.4 Alignment Preferences for FOOD4ALL Content

| Alignment Preference                                 | Participants | Percentage |
|------------------------------------------------------|--------------|------------|
| Combination of multiple alignment approaches         | 8            | 73%        |
| Alignment with existing learning outcomes            | 7            | 64%        |
| Alignment through practical competence units         | 4            | 36%        |
| Alignment through additional complementary outcomes  | 4            | 36%        |
| Alignment through assessment and evaluation criteria | 2            | 18%        |

The strongest preference was for a combination of multiple alignment approaches (8 participants, 73%). Alignment with existing learning outcomes was selected by 7 participants (64%). Alignment through practical competence units linked to kitchen practice and alignment through additional complementary learning outcomes were each selected by 4 participants (36%). Alignment through assessment criteria was selected by 2 participants (18%).

Participants supported integrating special dietary needs, allergen awareness, and inclusive recipe adaptation into existing gastronomy and food-related subjects. The combined approach was preferred because it allows connection with existing learning outcomes, practical competence development, and complementary enrichment without overloading the curriculum.

### 3.2.5 Use of Digital Tools

| Purpose                                             | Participants | Percentage |
|-----------------------------------------------------|--------------|------------|
| Personalised learning                               | 7            | 64%        |
| Flexibility and accessibility                       | 6            | 55%        |
| Collaborative learning                              | 5            | 45%        |
| Interactive learning through quizzes and multimedia | 5            | 45%        |
| Instant feedback and self-assessment                | 3            | 27%        |
| Supporting practical skill development              | 2            | 18%        |

For pedagogical purposes, the most selected uses were: personalised learning (7 participants, 64%), flexibility and accessibility (6 participants, 55%), collaborative learning (5 participants, 45%), and interactive learning through quizzes and multimedia (5 participants, 45%). Teaching methods most supported by digital tools were identified as: problem-based learning (7 participants, 64%), scenario-based learning (5 participants, 45%), and reflective learning after practice (5 participants, 45%)

| Teaching Method                                          | Participants | Percentage |
|----------------------------------------------------------|--------------|------------|
| Problem-based learning                                   | 7            | 64%        |
| Scenario-based learning                                  | 5            | 45%        |
| Reflective learning after practice                       | 5            | 45%        |
| Preparation before practical sessions / flipped learning | 3            | 27%        |

|                                                          |          |            |
|----------------------------------------------------------|----------|------------|
| <b>Competence-based training linked to kitchen tasks</b> | <b>3</b> | <b>27%</b> |
| <b>Self-paced learner preparation</b>                    | <b>2</b> | <b>18%</b> |
| <b>Gamification and game-based learning</b>              | <b>1</b> | <b>9%</b>  |

For assessment, self-assessment questions were valued most highly (8 participants, 73%), followed by platform-integrated quizzes and tests (7 participants, 64%), and project-based or practical assignments (5 participants, 45%). Participants noted that assessment of core practical competences still requires direct teacher observation.

The most clearly identified support need was practical methodological guidance, selected by 10 participants (91%). Training on digital pedagogy and curriculum alignment was selected by 5 participants (45%).

| <b>Assessment Method</b>                       | <b>Participants</b> | <b>Percentage</b> |
|------------------------------------------------|---------------------|-------------------|
| <b>Self-assessment questions</b>               | <b>8</b>            | <b>73%</b>        |
| <b>Platform-integrated quizzes and tests</b>   | <b>7</b>            | <b>64%</b>        |
| <b>Project-based or practical assignments</b>  | <b>5</b>            | <b>45%</b>        |
| <b>Peer-to-peer assessment</b>                 | <b>3</b>            | <b>27%</b>        |
| <b>Digital presentations or pitching tasks</b> | <b>3</b>            | <b>27%</b>        |
| <b>Simulations and role-playing activities</b> | <b>2</b>            | <b>18%</b>        |

### 3.3 TÜRKİYE

#### 3.3.1 FGM Background

The Turkish FGM was conducted online in April, 2026. A total of 10 participants took part, all VET teachers currently working in the Food and Beverage Services field within Vocational and Technical Anatolian High Schools in Türkiye. All participants are directly involved in kitchen-based training and have hands-on experience in delivering both theoretical and practical curriculum components.

#### 3.3.2 Curriculum Alignment and Digital Readiness

| Indicator                                             | Level    |
|-------------------------------------------------------|----------|
| Overall understanding of curriculum alignment         | High     |
| Confidence in integrating digital tools and platforms | Moderate |

Overall understanding of curriculum alignment was reported as moderate. Confidence in integrating digital tools and platforms was also reported as moderate. The Turkish VET system operates within a highly centralised framework governed by MoNE, where curricula are nationally standardised and teachers implement predefined learning outcomes, content structures, and assessment criteria. While this ensures consistency, it can limit flexibility in adapting curricula to emerging needs.

Participants show a degree of familiarity with digital tools, but this does not automatically translate into confident or regular use within gastronomy VET teaching. Confidence levels decrease when digital tools are linked to practical kitchen-based environments. Key challenges include curriculum alignment being understood primarily as following the official programme rather than actively designing connections between outcomes, teaching, and assessment; the difficulty of using digital tools during hands-on sessions without interrupting workflow; and uncertainty around selecting tools that genuinely support learning outcomes rather than adding extra workload.

#### 3.3.3 Pedagogical Approaches

The most frequently mentioned approaches were Experiential Learning and Work-Based Learning, consistent with the structure of gastronomy VET in Türkiye. Findings strongly

confirm that kitchen-based training is built around learning by doing. Participants almost unanimously rated hands-on practice, demonstration, reflection, and feedback cycles as highly effective. Demonstration remains a core teaching strategy: trainers typically show techniques step by step, after which learners repeat the process and improve through practice.

Competence-based and work-based learning are not applied as theoretical frameworks but are already embedded in everyday training practices. In the Turkish VET system, curricula defined by MoNE are structured around vocational competences and expected performance outcomes, so teaching naturally focuses on task completion, workplace standards, and real-life application. More formal pedagogical frameworks such as constructive alignment are less visible in day-to-day practice. Alignment tends to happen implicitly through experience rather than through consciously applied models.

Scenario- and problem-based elements appear in practice — especially when dealing with real kitchen constraints such as dietary restrictions, ingredient substitutions, or service pressure — but are usually integrated in an ad hoc manner depending on trainer experience, rather than being consistently designed as structured learning scenarios.

### 3.3.4 Alignment Preferences for FOOD4ALL Content

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#### Primary alignment preference – Türkiye

**Alignment with existing learning outcomes. This reflects how VET operates in Türkiye, where programmes are centrally defined and teachers are expected to follow predefined structures. A blended and incremental approach is preferred: embedding new content within ongoing lessons and practical activities so that it supports existing objectives without increasing workload or disrupting training flow.**

Participants clearly preferred alignment with existing learning outcomes. This reflects how VET operates in Türkiye, where programmes are centrally defined and teachers follow predefined structures. Participants are open to enriching current learning outcomes with additional elements, especially when directly linked to practical skills (such as adapting recipes for special diets, allergen awareness, or alternative ingredients). A more blended and incremental approach is preferred: embedding new content within ongoing lessons and practical activities so it supports existing objectives without increasing workload or disrupting training flow.

### 3.3.5 Use of Digital Tools

| Purpose                                    | Percentage      |
|--------------------------------------------|-----------------|
| Flexibility and accessibility              | 60%             |
| Supporting practical skill development     | 50%             |
| Personalised learning and instant feedback | 40%             |
| Interactive and collaborative use          | Lower frequency |

Digital tools are primarily valued for flexibility (60% of responses) and supporting practical skill development (50%), followed by personalised learning and instant feedback (40%). Digital tools are positioned around the learning process – before or after practice – rather than at the centre of it. The strongest support for teaching methods was for preparation before practical sessions (50%) and self-paced learning (50%), followed by gamification (40%). Scenario-based and problem-based approaches were less frequently associated with digital tools (10–20%), as they are more often implemented directly in practice.

| Teaching Method                       | Percentage |
|---------------------------------------|------------|
| Preparation before practical sessions | 50%        |
| Self-paced learning                   | 50%        |
| Gamification                          | 40%        |
| Problem-based learning                | 20%        |
| Scenario-based learning               | 10%        |

For assessment, participants showed preference for self-assessment (30%), quizzes and short tests (20%), and project-based or simulation-based tasks (20%). Digital tools are not considered sufficient for evaluating practical competences, which require direct kitchen observation.

| Assessment Method                        | Percentage |
|------------------------------------------|------------|
| Self-assessment                          | 30%        |
| Quizzes and short tests                  | 20%        |
| Project-based and simulation-based tasks | 20%        |

The most important support needs identified were practical methodological guidance and training on digital pedagogy and curriculum alignment. Teachers need concrete answers to how digital activities can directly support specific learning outcomes and at which stage of the lesson (before, during, or after practice) tools should be used.

## 3.4 SPAIN

### 3.4.1 FGM Background

The Spanish FGM was organised in February, 2026. The meeting was conducted in hybrid format (in-person and online) on 23 February 2026 over 2 hours. A total of 20 participants took part, representing a broad and diverse group including gastronomy teachers, restaurant service trainers, department coordinators, innovation and Erasmus+ staff, executive chefs, hotel training managers, catering entrepreneurs, nutrition specialists, local employers, adult learners, and professionals linked to inclusion and employability services. Online participants joined from different Spanish regions including the Canary Islands and Andalusia. This structure significantly enriched the exchange by combining institutional, educational, and business perspectives from different territories. The session combined structured roundtable discussion, guided thematic debate, a social networking exchange, an interactive workshop with teachers and learners, open reflection on labour market needs, and collection of feedback and final conclusions.

### 3.4.2 Curriculum Alignment and Digital Readiness

Overall understanding of curriculum alignment was reported as high. Confidence in integrating digital tools and platforms was reported as high. Participants demonstrated

strong awareness of the need to align innovative content with existing VET programmes such as Cooking and Gastronomy, Restaurant Services, Bakery and Pastry, and Higher VET hospitality qualifications. There was broad consensus that FOOD4ALL content can be integrated through current modules related to food safety, nutrition, menu planning, customer service, sustainability, and kitchen operations.

Key challenges include existing curricula being already intensive and time-limited, leaving reduced space for additional stand-alone content; teachers requiring practical examples showing how FOOD4ALL resources align with official learning outcomes; and the need to continue assessing practical competences face-to-face in workshop environments.

### **3.4.3 Pedagogical Approaches**

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The most frequently mentioned approaches were Experiential Learning, Competence-Based Training, Work-Based Learning, Scenario/Case-Based Learning, Blended/Flipped Learning, and Universal Design for Learning. Participants consistently emphasised that learning by doing remains the foundation of gastronomy VET training: kitchen workshops, practical repetition, trainer demonstrations, and direct correction continue to be the most effective methods for technical skill development.

There was clear support for combining traditional practical training with case studies involving allergies or special diets, real customer scenarios, problem-solving under service pressure, online preparation before practical sessions, and inclusive teaching methods for diverse learner profiles. Participants agreed that digital tools should complement rather than replace hands-on professional practice.

### **3.4.4 Alignment Preferences for FOOD4ALL Content**

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Participants prioritised alignment with existing learning outcomes, competence-based alignment linked to kitchen practice, and a combination of multiple alignment approaches. The most effective route identified was a blended model in which FOOD4ALL resources support food safety units, allergen management training, healthy and adapted menu planning, sustainable gastronomy modules, customer care, and practical recipe adaptation tasks. This approach was considered more realistic, sustainable, and easier for institutions to adopt within current VET frameworks.

### **3.4.5 Use of Digital Tools**

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For pedagogical purposes, participants valued: flexibility and accessibility (80%), supporting practical skill development (75%), interactive learning through multimedia and quizzes (70%), instant feedback and self-assessment (65%), personalised learning (60%), and collaborative learning (45%). Digital tools were seen as especially useful before entering the kitchen environment, allowing learners to review procedures, allergen protocols, ingredients, and techniques in advance.

| Teaching Method                                          | Percentage |
|----------------------------------------------------------|------------|
| Preparation before practical sessions / Flipped learning | 80%        |
| Scenario-based learning                                  | 75%        |
| Competence-based training linked to kitchen tasks        | 70%        |
| Reflective learning after practice                       | 65%        |
| Self-paced learner preparation                           | 60%        |
| Problem-based learning                                   | 55%        |
| Gamification and game-based elements                     | 40%        |

Teaching methods best supported by digital tools were identified as: preparation before practical sessions/flipped learning (80%), scenario-based learning (75%), competence-based training linked to kitchen tasks (70%), reflective learning after practice (65%), self-paced learner preparation (60%), problem-based learning (55%), and gamification (40%).

For assessment, the most valued methods were: platform-integrated quizzes and short tests (75%), self-assessment tools (70%), project-based or practical assignments (65%), simulations and role-play (55%), peer-to-peer feedback (45%), and digital presentations (40%).

Support needs identified included: practical methodological guidance, ready-to-use FOOD4ALL lesson plans, training on digital pedagogy and curriculum alignment, short multimedia resources adapted to workshop realities, easier integration into official modules, and examples of mixed assessment methods combining digital and practical learning.

## 3.5 GREECE

### 3.5.1 FGM Background

The Greek FGM was organised in hybrid format (in-person and online) between April and May 2026. A total of 13 participants took part, all VET teachers employed in the Food and Beverage Services sector at Higher Vocational Training Schools (SAEK) in Greece. All participants are actively engaged in kitchen-oriented instruction. The FGM was conducted individually with each participant to ensure comprehensive and detailed discussion.

### 3.5.2 Curriculum Alignment and Digital Readiness

Overall understanding of curriculum alignment was reported as high. Confidence in integrating digital tools and platforms was reported as high. Participants widely perceived digital learning environments as valuable for supporting blended learning, improving access to theoretical knowledge, preparing learners for practical kitchen activities, and fostering independent learning. Participants agreed that digital platforms and special diet topics could be integrated into existing curriculum areas including hygiene and food safety standards and healthy nutrition.

Key challenges include ensuring that digital tools are integrated through clear methodological approaches that directly support practical kitchen training rather than replacing it; addressing differences in digital competence, technology access, and institutional resources; and the need for a curriculum-aligned FOOD4ALL guide that fits within already intensive training programmes while maintaining face-to-face practical assessment.

### 3.5.3 Pedagogical Approaches

| Approach                            | Percentage |
|-------------------------------------|------------|
| Experiential Learning (Kolb)        | 46.2%      |
| Work-Based / Situated Learning      | 23.1%      |
| Universal Design for Learning (UDL) | 15.4%      |
| Bloom's Taxonomy                    | 7.7%       |
| Cooperative Learning                | 7.7%       |

The most frequently mentioned approaches were: Experiential Learning/Kolb (46.2%), Work-Based Learning/Situated Learning (23.1%), Universal Design for Learning/UDL (15.4%), Bloom's Taxonomy (7.7%), and Cooperative Learning (7.7%). Participants consistently emphasised that experiential, work-based, and UDL approaches form the foundation of VET in gastronomy. Practical kitchen sessions and immediate feedback were identified as extremely effective for developing technical culinary skills.

Participants highlighted the importance of integrating contemporary learner-centred approaches including problem-solving during high-pressure kitchen service, realistic routines related to allergies and special diets, and adapting teaching for learners with different backgrounds. Cooperative learning was also identified as an important approach in kitchen-based training. Participants rated practical kitchen-based learning as the most effective stage for skill development, with reflection on mistakes and continuous application of feedback considered highly valuable.

#### **3.5.4 Alignment Preferences for FOOD4ALL Content**

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Participants showed a clear preference for alignment through practical competence units linked to kitchen practice (53.8%), followed by a combination of multiple alignment approaches (30.8%). Alignment exclusively with existing learning outcomes (7.7%) and through additional complementary learning outcomes (7.7%) were less preferred.

Participants emphasised the value of embedding inclusive gastronomy topics within authentic vocational tasks such as food safety procedures, allergen management, and adapted recipe preparation. A combined approach was seen as offering greater pedagogical flexibility and supporting more comprehensive integration of inclusive gastronomy principles.

#### **3.5.5 Use of Digital Tools**

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For pedagogical purposes, participants most frequently selected: interactive learning through multimedia and quizzes (53.8%), collaborative learning (23.1%), personalised learning (15.4%), and flexibility and accessibility (7.7%). Teaching methods most supported by digital tools were identified as: scenario-based learning (53.8%), reflective learning after practice (53.8%), problem-based learning (38.5%), competence-based training linked to kitchen tasks (23.1%), flipped learning preparation (15.4%), and self-paced preparation (15.4%).

| Assessment Method                       | Percentage |
|-----------------------------------------|------------|
| Project-based or practical assignments  | 69.2%      |
| Digital presentations or pitching tasks | 61.5%      |
| Self-assessment questions               | 23.1%      |
| Simulations and role-playing activities | 23.1%      |
| Platform-integrated quizzes and tests   | 15.4%      |
| Peer-to-peer assessment                 | 15.4%      |

For assessment, the most valued methods were: project-based or practical assignments (69.2%), digital presentations or pitching tasks (61.5%), self-assessment questions (23.1%), simulations and role-playing (23.1%), platform-integrated quizzes and tests (15.4%), and peer-to-peer assessment (15.4%). Participants considered project-based assignments and digital presentations as the primary application areas for digital tools in assessment.

Support needs: practical methodological guidance was selected by 84.6% of participants, making it the most critical identified need. Training on digital pedagogy and curriculum alignment was selected by 69.2%.

## CHAPTER 4 – CURRICULUM ALIGNMENT FRAMEWORK FOR INCLUSIVE CULINARY EDUCATION

Vocational education and training providers across Europe already operate within established curricular structures, qualification frameworks, and programme requirements. Consequently, the purpose of FOOD4ALL is not to introduce a separate curriculum or additional stand-alone course. Rather, the project seeks to support educators in enriching existing culinary training programmes with knowledge, skills, and practices related to dietary inclusivity and special dietary requirements.

This chapter therefore focuses on practical curriculum alignment. It provides guidance on how FOOD4ALL resources—including the Culinary Inclusivity Guide, e-learning courses, practical activities, visual resources, and assessment ideas—can be integrated into existing culinary VET programmes without requiring major curriculum redesign. The chapter highlights opportunities for embedding FOOD4ALL content within commonly delivered culinary modules, identifies pedagogical approaches that can support integration, and offers examples of how educators can connect inclusive culinary competences with existing learning outcomes and training activities.

Rather than prescribing a single implementation model, the framework recognises the diversity of VET systems across partner countries and encourages flexible adaptation according to local curricular requirements, institutional priorities, and learner needs. The aim is to help educators translate FOOD4ALL resources into meaningful learning experiences that strengthen learners' ability to respond to diverse dietary requirements in contemporary culinary and food-service environments.

### 4.1 CONSTRUCTIVE ALIGNMENT (BIGGS, 1996; BIGGS & TANG, 2011)

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The concept of constructive alignment, introduced by John Biggs in 1996 and elaborated substantially in the successive editions of *Teaching for Quality Learning at University* (Biggs & Tang, 2011), represents one of the most consequential contributions to curriculum theory in the past three decades. Its core proposition is deceptively simple: in a coherently designed curriculum, the intended learning outcomes, the teaching and learning activities, and the assessment tasks must all be aligned with one another so that each element of the system works in the same direction. The word 'constructive' carries a dual meaning: it refers both to the constructivist principle that learners construct understanding through their own cognitive activity, and to the act of deliberately constructing a learning environment in which that activity is directed towards the intended outcomes. Misalignment – the condition in which students are assessed on outcomes that teaching activities did not develop, or in which

activities engage competences that assessments do not recognise – is, in Biggs’s analysis, the principal structural cause of surface learning in formal education.

Although Biggs originally formulated constructive alignment for higher education, the framework has been extensively applied in VET curriculum analysis and reform. CEDEFOP’s work on learning outcomes approaches in European VET (CEDEFOP, 2017, 2023) draws implicitly on constructive alignment logic: the move towards outcomes-based qualification design at EQF levels 3 to 5 requires exactly the three-way coherence that Biggs described. In practice, however, alignment is rarely fully achieved. A recurring finding in VET curriculum research is that formal learning outcome statements are revised without corresponding revision of assessment instruments or teaching methods, producing a surface alignment that leaves classroom practice unchanged (Young & Muller, 2014). This gap between intended and enacted curriculum is particularly visible when new content areas – such as allergen management, special diet preparation, or sustainable cooking – are added to VET programmes without reconsidering how existing practical sessions and assessment rubrics are structured.

For the FOOD4ALL project, constructive alignment provides both a diagnostic tool and a design principle. Focus group findings from all five partner countries revealed a consistent pattern: trainers and programme coordinators expressed readiness to integrate FOOD4ALL content but identified the lack of explicit connections to national learning outcomes as the primary barrier to sustained integration. This is precisely the misalignment problem that Biggs identified. The framework therefore underpins a central design decision in this handbook: every FOOD4ALL integration point is mapped to an existing learning outcome in the host programme, every digital activity is positioned to prepare learners for a specific practical performance, and every assessment recommendation is derived from that same intended competence. A trainee who is expected to prepare an allergen-free version of a standard dish should encounter that task in their pre-kitchen digital preparation (abstract conceptualisation), in the supervised kitchen session (concrete experience), and in the assessment criteria by which their performance is evaluated. Without this three-way coherence, FOOD4ALL resources risk becoming supplementary material that does not influence the outcomes by which learners are ultimately judged.

## 4.2 COMPETENCE-BASED EDUCATION AND TRAINING (CBET)

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Competence-Based Education and Training (CBET) constitutes the dominant paradigm for vocational qualification design across Europe and in many other regions, consistently articulated and promoted by CEDEFOP, the European Training Foundation (ETF), and UNESCO-UNEVOC as the appropriate framework for aligning VET provision with labour market requirements. The conceptual shift that CBET represents is from curriculum as a body of knowledge to be transmitted, towards curriculum as a structured development of the

capacity to perform occupational roles. In CBET, a ‘competence’ is not reducible to knowledge or skills in isolation; it denotes an integrated ability to mobilise knowledge, skills, and attitudes in order to perform complex tasks in variable real-world conditions (CEDEFOP, 2023; ETF, 2020). This integration requirement distinguishes CBET from earlier knowledge-centred approaches and has direct implications for how curricula are designed, delivered, and assessed.

The relationship between CBET and constructive alignment is structural rather than incidental. Both frameworks insist that curriculum design must begin with the specification of intended performance – in CBET, the occupational competence; in constructive alignment, the learning outcome – and work backwards to determine what teaching activities and assessment methods will reliably develop and demonstrate that performance. CBET adds a further dimension that constructive alignment does not foreground: the imperative that the competences specified must be occupationally valid, meaning that they must reflect genuine professional requirements rather than institutionally convenient proxies. This distinction matters for FOOD4ALL because it reinforces the project’s own rationale: the A2 national landscape analyses consistently documented that allergen management, vegan and vegetarian cooking, and dietary communication with customers are increasingly mandatory professional competences in the European hospitality sector, yet they remain absent or marginal in most partner country VET frameworks at EQF 3–4 level. Integrating FOOD4ALL content is therefore not an enrichment exercise; it is a response to a documented competence gap between what VET programmes currently certify and what professional practice now requires.

In terms of practical curriculum design, CBET provides the language through which FOOD4ALL content is most productively framed for VET trainers and institutions. Rather than presenting allergen awareness as a new topic to be taught, it should be formulated as an extension of an existing occupational competence: the food safety and hygiene competence that is universally present in EQF 3–4 gastronomy qualifications across all five partner countries. Similarly, vegan recipe adaptation is most readily received by trainers not as a new subject but as a development of the menu planning and recipe design competences already embedded in national qualifications. This reframing has practical consequences: it positions FOOD4ALL as competence extension rather than curriculum addition, which reduces resistance to integration and maintains coherence with the CBET structures within which partner country trainers are required to operate.

### 4.3 EXPERIENTIAL LEARNING THEORY (KOLB, 1984)

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David Kolb’s Experiential Learning Theory, presented in its fullest form in *Experiential Learning: Experience as the Source of Learning and Development* (1984), synthesises a tradition of thought about the relationship between experience and knowledge that stretches

from John Dewey's pragmatist epistemology (Dewey, 1938) through Kurt Lewin's action research model to the developmental psychology of Jean Piaget. Kolb's central claim is that learning is not the reception of information but a process of meaning-making in which experience is transformed through reflection and conceptualisation into knowledge that can guide future action. The four-stage learning cycle – concrete experience, reflective observation, abstract conceptualisation, and active experimentation – describes not a linear sequence but a recursive process in which any stage can serve as an entry point, and in which movement through the complete cycle is associated with deeper and more transferable learning.

It is important to note, in keeping with scholarly rigour, that Kolb's model has attracted substantive criticism since its introduction. Critics have questioned the empirical basis of the associated Learning Styles Inventory (Coffield et al., 2004), the adequacy of the four-stage model as a description of all learning processes, and the culturally specific assumptions embedded in the experiential tradition (Holman et al., 1997). These criticisms do not invalidate the model for curriculum design purposes, but they do counsel against applying it mechanically or treating the four stages as a guaranteed sequence. What the model offers for vocational curriculum design is a framework for sequencing learning activities so that experience, reflection, conceptualisation, and application are each given structural space in the curriculum – a sequencing logic that is absent from curricula that rely exclusively on didactic instruction or, conversely, from unstructured practicum experiences with no reflective or conceptual support.

Gastronomy VET provides one of the most natural institutional applications of the experiential learning cycle. The practical kitchen session constitutes the concrete experience stage in its most direct form; trainer-guided feedback during and after practice corresponds to facilitated reflective observation; pre-session theoretical preparation – whether through conventional instruction or through FOOD4ALL digital modules – provides the abstract conceptualisation that gives experience its interpretive framework; and the application of modified technique or improved allergen management in subsequent kitchen tasks constitutes active experimentation. Focus group evidence from all five partner countries confirmed this cyclical structure as the implicit operating rhythm of culinary training, even where trainers did not use Kolb's vocabulary (A3 reports). The before-during-after kitchen integration cycle developed in Chapter 5 of this handbook is a formalisation of this naturally occurring experiential pattern, designed to ensure that each stage receives deliberate pedagogical attention rather than occurring incidentally.

#### **4.4 SITUATED LEARNING AND COMMUNITIES OF PRACTICE (LAVE & WENGER, 1991)**

Jean Lave and Etienne Wenger's *Situated Learning: Legitimate Peripheral Participation* (1991) constitutes a fundamental challenge to cognitivist models of learning that dominated

educational psychology through much of the twentieth century. Their argument is that knowledge is not a decontextualised mental representation that is first acquired in the abstract and then applied to specific situations; rather, knowing and doing are inseparable, and learning is a process of increasingly full participation in the practices of a community. In the situated learning model, the novice does not first learn about a practice and then join it; they learn by participating in the practice from the outset, initially in peripheral and supervised roles, and gradually moving towards full, autonomous participation as competence develops. Wenger's subsequent development of communities of practice theory (Wenger, 1998) elaborated the social and institutional dimensions of this process, identifying the mutual engagement, joint enterprise, and shared repertoire that characterise a functioning occupational community.

The implications for VET curriculum design are significant and in some respects run counter to the assumptions embedded in formal qualification frameworks. If genuine occupational competence can only be developed through participation in authentic work contexts – not through classroom simulations or isolated skill exercises – then the curriculum structures that are most pedagogically defensible are those that maximise the authenticity and duration of work-based and kitchen-based learning, and that position classroom and digital instruction as preparation for and support of practice rather than as substitutes for it. This is precisely the design logic endorsed by focus groups across all five partner countries: in France, trainers described kitchen practice as the irreplaceable site of culinary learning, with digital content serving a supporting preparatory role; in North Macedonia, applying feedback in subsequent kitchen tasks – the re-entry into authentic practice informed by guided reflection – was the highest-rated learning activity assessed. Situated learning theory thus provides the strongest theoretical warrant for the principle that runs throughout this handbook: FOOD4ALL digital resources support participation in professional kitchen practice; they do not and cannot substitute for it.

Situated learning also has important implications for the content of FOOD4ALL integration. Allergen management, special diet preparation, and dietary communication with customers are not merely bodies of knowledge to be transmitted; they are professional practices that are constituted within the specific social and material contexts of hospitality kitchens and service environments. Learning to manage cross-contamination risk in a professional kitchen requires more than knowing the regulatory requirements: it requires developing the perceptual attentiveness, the collaborative communication habits, and the procedural discipline that are characteristics of a professional community of practice in food safety-conscious settings. FOOD4ALL scenario tasks and case studies are most pedagogically effective when they are designed to replicate the cognitive and social demands of these authentic professional contexts, and when they are positioned as preparatory scaffolding for kitchen practice rather than as self-contained learning activities.

## 4.5 UNIVERSAL DESIGN FOR LEARNING (CAST, 2018)

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Universal Design for Learning (UDL), developed by the Center for Applied Special Technology (CAST) and articulated in the UDL Guidelines (CAST, 2018), applies to curriculum design the architectural principle of universal design: rather than building a standard environment and then providing adaptations for those who cannot use it, the environment is designed from the outset to be accessible to the widest possible range of users. In educational terms, UDL proposes that curricula should offer multiple means of representation (varied formats and modalities through which content is conveyed), multiple means of action and expression (diverse pathways through which learners can demonstrate understanding), and multiple means of engagement (differentiated approaches to motivation, challenge, and self-regulation). The theoretical foundations of UDL draw on cognitive neuroscience research on learning variability (Rose & Meyer, 2002), as well as on inclusive education principles developed within the disability studies tradition.

The relevance of UDL to FOOD4ALL extends beyond accessibility in the narrow sense. The learner populations served by VET programmes in the five partner countries are characterised by substantial diversity: diversity of prior formal education, of first language, of cultural relationship to food and dietary practice, of age and professional experience, and of learning context (initial VET, adult vocational training, higher education, in-service professional development). A curriculum design that assumes a uniform learner profile will systematically disadvantage large portions of this diverse population. UDL provides the framework for ensuring that FOOD4ALL content is not implicitly designed for the ‘average’ learner – typically imagined as a young initial VET student with limited prior experience – but is structured to accommodate adult learners who bring professional knowledge that formal instruction often fails to recognise, learners for whom the instructional language requires additional cognitive effort, and learners whose cultural relationship to dietary diversity gives them relevant knowledge that institutional curricula do not typically validate.

In the specific context of inclusive culinary education – the explicit commitment of the FOOD4ALL project – UDL also has a second-order relevance. Learners who are being trained to cook inclusively for clients with diverse dietary requirements are themselves learners in a curriculum that should model inclusive design. A FOOD4ALL programme that fails to accommodate the learning diversity of its own trainees contradicts the inclusive values it is intended to promote. Focus group participants in Greece and Spain explicitly referenced UDL principles in their descriptions of effective pedagogical approaches, and the multi-format design of FOOD4ALL platform content – written modules, interactive quizzes, practical scenario tasks – represents an operationalisation of the multiple means of representation principle that UDL recommends.

## 4.6 TOWARDS A COHERENT CURRICULUM FRAMEWORK: INTEGRATING THE FIVE PERSPECTIVES

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The five frameworks presented above are not independent theoretical options between which curriculum designers must choose. They are complementary lenses that address different but interconnected aspects of the same design challenge. Understanding their relationships is more useful for practical curriculum development than treating each as a self-contained module.

Constructive alignment and CBET operate at the level of curriculum architecture: they determine what the curriculum is for, what its intended outcomes are, and whether its constituent elements are organised coherently to achieve those outcomes. Together, they provide the design logic that ensures FOOD4ALL content is not an add-on but a structurally integrated element of the curriculum. Constructive alignment ensures three-way coherence between outcomes, activities, and assessment; CBET grounds those outcomes in genuine occupational requirements and gives them the professional legitimacy that VET trainers and employers require.

Experiential learning and situated learning operate at the level of the learning process: they describe how competence is actually developed in vocational contexts and what conditions make that development possible. Both frameworks converge on the irreplaceable role of authentic practice experience: Kolb's model insists that experience must be accompanied by structured reflection and conceptualisation if it is to generate transferable learning; Lave and Wenger's model insists that the experience must be situated in a genuine community of practice and not merely simulated in a classroom exercise. For FOOD4ALL, the pedagogical consequence is clear: digital content and scenario tasks are valuable insofar as they are positioned around authentic kitchen practice – preparing for it, structuring reflection on it, and enriching conceptualisation after it.

Universal Design for Learning operates at the level of equity and access: it ensures that the curriculum architecture defined by constructive alignment and CBET, and the learning processes enabled by experiential and situated approaches, are genuinely available to the full diversity of learners rather than only to those whose profile matches implicit assumptions. UDL is the framework that makes inclusive culinary education possible in practice, not merely as an aspiration. Its application to FOOD4ALL requires that every design decision – content format, task structure, assessment modality, platform accessibility – be evaluated against the question of whether it creates unnecessary barriers for any segment of the learner population.

The following table summarises the alignment between FOOD4ALL platform components and the theoretical frameworks presented in this chapter. This mapping does not imply that each component is exclusively associated with a single framework; it identifies the primary theoretical warrant for each component's position and function in the curriculum design.

| FOOD4ALL Platform Component                   | Primary Theoretical Framework(s)                                                                               |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| E-learning modules (pre-session preparation)  | Constructive Alignment (Biggs & Tang, 2011); Flipped Learning (Bergmann & Sams, 2012)                          |
| Supervised practical kitchen activities       | Experiential Learning Theory (Kolb, 1984); Situated Learning and Communities of Practice (Lave & Wenger, 1991) |
| Special diet and allergen scenario tasks      | Problem-Based Learning (Barrows, 1986); Competence-Based Education and Training (CEDEFOP, 2023)                |
| Menu design and adaptation exercises          | Competence-Based Education and Training; Constructive Alignment                                                |
| Reflective journals and self-assessment tools | Reflective Practice (Schön, 1983); Experiential Learning Cycle (Kolb, 1984)                                    |
| Multi-format, flexible content access         | Universal Design for Learning (CAST, 2018)                                                                     |

## CHAPTER 5 – DIGITAL INTEGRATION STRATEGIES FOR CULINARY VET

This chapter presents evidence-based digital integration strategies for gastronomy VET. Building on the theoretical foundations established in Chapter 4, it addresses the pedagogical question of how digital tools – including the FOOD4ALL platform – should be used in culinary training contexts. The central principle underlying all strategies in this chapter is that digital tools support and enrich practice-based learning; they do not replace it. Every strategy presented here is grounded in international research literature and is directly connected to focus group evidence from partner countries.

### 5.1 DIGITAL LEARNING IN PRACTICAL VOCATIONAL EDUCATION

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The integration of digital tools in vocational education has been extensively studied and promoted by international organisations including the European Commission through the DigComp and DigCompEdu frameworks, UNESCO, and the OECD. The DigCompEdu framework (Redecker, 2017) identifies six competence areas for educators in digital learning: digital resources, teaching and learning, assessment, empowering learners, facilitating learner digital competence, and professional engagement. Within practical vocational fields such as gastronomy, the framework's emphasis on digital tools as instruments to empower learners and support real-world performance is particularly salient.

The OECD has consistently noted in its learning research that effective digital integration in vocational and practical fields is characterised by three conditions: digital tools must be purposefully connected to the learning objective; they must be positioned to complement and prepare for practice, not to replace it; and they must be accessible to all learners regardless of infrastructure. Focus group evidence from all five partner countries aligns with these conditions (A3 reports). The French focus group specifically highlighted the critical importance of mobile accessibility given limited IT infrastructure in many training centres – a condition that FOOD4ALL platform design must address directly.

### 5.2 FLIPPED LEARNING IN CULINARY EDUCATION (BERGMANN & SAMS, 2012)

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Flipped learning, introduced and systematised by Jonathan Bergmann and Aaron Sams, inverts the traditional instructional sequence: learners engage with new content independently before the face-to-face session, and the in-person time is dedicated to applying, practising, and extending that knowledge. In culinary VET, this model translates naturally into a structure where learners prepare theoretical knowledge digitally before

kitchen sessions, and the kitchen time is reserved for supervised practice, experimentation, and feedback.

Focus group data strongly supports flipped learning as the primary integration model for FOOD4ALL digital content. In Spain, 80% of focus group participants endorsed pre-session digital preparation as their preferred approach for FOOD4ALL content. In Türkiye, 50% preferred preparation before sessions. The French focus group described the use of platform content to introduce topics before practical application. In all cases, the digital platform was envisioned as a pre-kitchen preparation tool rather than a classroom replacement. The flipped learning model therefore provides the theoretical and empirical basis for the before-during-after kitchen cycle described in Section 5.5 of this chapter and operationalised in Chapter 5's trainer guidance.

### 5.3 SCENARIO-BASED LEARNING IN GASTRONOMY CONTEXTS

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Scenario-based learning (SBL) engages learners by placing them in realistic, contextualised problem situations that require them to draw on knowledge and make decisions as they would in professional practice. Unlike abstract content delivery, scenario-based tasks generate the cognitive and motivational conditions associated with authentic performance: learners must identify relevant information, evaluate options, manage competing demands, and justify their choices. In culinary VET, SBL is particularly powerful for dietary and allergen-related content because these topics are inherently situational – their significance becomes concrete only in the context of a real customer request or a live kitchen preparation task.

Across all five partner countries, scenario-based learning was among the most consistently endorsed approaches for FOOD4ALL content delivery (A3 reports). In Spain, 75% of participants rated scenario-based learning highly, with specific mention of allergen requests, vegan adaptation tasks, and service incident scenarios. In Greece, 53.8% supported scenario-based approaches. In North Macedonia, 64% of participants endorsed scenario-based tasks. The French focus group noted that placing learners in professional conditions through scenarios was among the most effective approaches available. These convergent findings justify scenario-based tasks as a primary vehicle for FOOD4ALL special diet content across all partner country contexts.

### 5.4 PROBLEM-BASED LEARNING (BARROWS, 1986)

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Problem-Based Learning (PBL), developed by Howard Barrows in the context of medical education and subsequently adopted across vocational fields, organises learning around the challenge of solving authentic, ill-structured problems. Rather than presenting students with information to memorise, PBL presents them with a problem they must resolve by identifying

what they know, what they need to learn, and how to apply emerging knowledge. The learning process is driven by the problem itself rather than by a predetermined content sequence.

In gastronomy VET, PBL maps directly onto the real challenges professional cooks and kitchen managers face: ingredient substitution under time pressure, management of allergen cross-contamination, adaptation of a menu to accommodate multiple simultaneous dietary requirements, or communication with a customer about a complex dietary restriction during service. These are not problems with single correct answers; they require judgment, creative problem-solving, and professional knowledge. FOOD4ALL's dietary restriction scenarios function as PBL triggers when they are framed not as content to read but as problems to solve. Focus group evidence from France specifically identified problem-based and scenario-based approaches as among the most effective for their professional culinary training contexts (A3, France). The FOOD4ALL platform's scenario cases are most pedagogically effective when used in this PBL mode, with learners actively working through the problem before receiving structured feedback.

## 5.5 REFLECTIVE LEARNING AFTER PRACTICE (KOLB, 1984; SCHÖN, 1983)

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Reflective learning – the deliberate cognitive process of analysing experience to generate insight and guide future performance – is a cornerstone of both Kolb's experiential learning cycle (the reflective observation stage) and Donald Schön's concept of reflection-in-action and reflection-on-action. In vocational education, structured reflection after practical sessions is consistently associated with deeper skill development, greater transfer to new contexts, and stronger professional identity formation.

Focus group evidence confirms that post-practice reflection is both valued and practised across partner country culinary training contexts. In Spain, 65% of participants supported reflective learning after kitchen practice. In Greece, 53.8% endorsed it. In North Macedonia, reflection on mistakes scored 4.00 out of 5, indicating a present but potentially underdeveloped reflective culture in their kitchen training. Applying feedback in subsequent tasks – the behavioural expression of reflection – was the single highest-rated learning activity across all countries (North Macedonia: 4.64/5). FOOD4ALL reflection activities and self-assessment tools are most effectively positioned immediately after kitchen sessions, while experience is fresh and learners can directly connect their reflective responses to specific practical events. Prompts such as "What did you change in the recipe?", "How did you manage the allergen risk?", and "What would you do differently next time?" operationalise the reflective observation stage of the experiential learning cycle.

## 5.6 THE BEFORE-DURING-AFTER INTEGRATION CYCLE

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Drawing together the theoretical frameworks presented in this chapter, the FOOD4ALL digital integration model for culinary VET is organised around a three-stage cycle anchored to the practical kitchen session. This cycle synthesises flipped learning, experiential learning, situated learning, and reflective practice into a coherent sequence that positions digital tools in their most pedagogically effective role.

**Before kitchen practice:** FOOD4ALL e-learning modules, video content, and quizzes introduce the theoretical and conceptual foundations that learners will need in the kitchen session. This stage corresponds to the abstract conceptualisation stage of the experiential learning cycle and implements the flipped learning model endorsed strongly across partner countries. Topics suitable for the before stage include allergen identification and management, special diet principles, ingredient substitution principles, and cultural dietary diversity.

**During kitchen practice:** Learners apply the knowledge built in the preparation stage to real kitchen tasks. This is the concrete experience stage of the experiential learning cycle and the situated learning context in which occupational competences are actually developed. FOOD4ALL's contribution during this stage is primarily through task design: trainer task briefings that connect digital preparation to specific kitchen activities, scenario-based problem tasks integrated within existing recipe exercises, and progressive dietary adaptations introduced within familiar practical work.

**After kitchen practice:** FOOD4ALL reflection activities, self-assessment quizzes, and peer discussion tasks support the reflective observation and active experimentation stages of the experiential cycle. This stage consolidates learning, identifies areas for development, and prepares learners for the next kitchen session. Focus group evidence confirms that post-practice reflection and feedback application are among the highest-rated and most valued learning activities in culinary VET across all five countries.

## 5.7 DIGITAL INTEGRATION RECOMMENDATIONS

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The following recommendations distil the theoretical frameworks and focus group evidence presented in this chapter into practical principles for the use of FOOD4ALL digital resources in culinary VET contexts.

- Position FOOD4ALL digital content consistently in the pre-kitchen preparation phase. The evidence base from flipped learning research and from focus groups in Spain (80%), Türkiye (50%), France, and North Macedonia is unambiguous: digital content serves its most effective pedagogical function when used to build knowledge before practical sessions.

- Design FOOD4ALL digital tasks as authentic problems, not content deliveries. Scenario-based and problem-based framing of dietary content is significantly more effective than linear information presentation. Tasks should require learners to make decisions, identify risks, and justify choices as they would in professional kitchen conditions.
- Ensure every FOOD4ALL digital activity is connected to a specific kitchen task or learning outcome. The constructive alignment principle requires that digital preparation, practical activity, and assessment all serve the same competence. Disconnected digital activities do not contribute to competence development and are unlikely to be integrated by trainers.
- Use reflection tools after kitchen practice, not after digital content. Post-practice reflection is effective because it connects cognitive analysis to lived experience. Reflection prompts positioned immediately after digital modules, before any kitchen application, do not have the same depth of experiential foundation.
- Adapt digital integration intensity to learner profile. Adult learners in vocational training centres are more capable of autonomous digital preparation than initial VET students at upper secondary level, as confirmed by the French focus group. For younger learners, in-class structured use of FOOD4ALL digital resources with trainer guidance is more appropriate than independent pre-session preparation.
- Maintain mobile-first accessibility as a design requirement. The French focus group identified limited IT infrastructure and dependence on mobile access as the dominant digital reality for many training centres. All FOOD4ALL resources must be fully functional on mobile devices to achieve realistic integration across partner country contexts.

## CHAPTER 6 – IMPLEMENTATION ROADMAP

Curriculum theory distinguishes consistently between an intended curriculum, articulated in syllabi and qualification standards, and an enacted curriculum, which is what trainers and learners actually experience in the classroom and the kitchen (Goodlad, 1979; Van den Akker, 2003). A substantial body of implementation research in vocational education demonstrates that the gap between these two layers is the principal reason why externally developed educational resources – however well designed – fail to achieve sustained classroom use (Fullan, 2007; CEDEFOP, 2022). Resources that arrive as free-standing modules, disconnected from existing learning outcomes, assessment instruments, and timetabling structures, are typically used once for demonstration purposes and then abandoned once external project funding and associated attention cease. This chapter responds directly to that risk. Rather than positioning FOOD4ALL as an additional unit to be taught alongside existing curricula, it specifies how FOOD4ALL content can be absorbed into the enacted curriculum of culinary VET programmes at the level of individual teaching sessions, recurring assessment tasks, and institutional planning cycles.

The roadmap presented here is the direct translation of the evidence assembled in the preceding chapters into an operational sequence of action. The A2 cross-country training landscape analyses (Chapter 2) established which curriculum areas already exist across partner-country culinary VET programmes, which topics are addressed only partially, and which are absent altogether; the A3 focus group consultations (Chapter 3) captured how trainers, learners, and industry stakeholders themselves judge the feasibility and desirability of introducing inclusive dietary content into those areas; and the curriculum alignment and digital integration frameworks (Chapters 4 and 5) supplied the theoretical warrant – constructive alignment, competence-based education and training, experiential and situated learning, and flipped learning – for how that content should be sequenced pedagogically once an entry point has been identified. The implementation pathways that follow therefore do not introduce new curriculum logic; they apply the logic already established in this handbook to the specific institutional landscape documented for each partner country, converting analytical findings into a set of concrete, reusable teaching and assessment activities that a trainer can adopt with minimal preparatory burden.

Three design principles govern how the roadmap was constructed, and each merits explanation because each addresses a specific implementation risk identified in the focus group evidence. The first principle is entry-point realism. Rather than proposing a single integration pathway for an idealised ‘average’ VET institution, the roadmap is organised around the six curriculum areas – food safety and hygiene, basic culinary skills, kitchen operations, menu preparation, nutrition basics, and work-based learning – that the A2 landscape analyses confirmed exist, in some recognisable form, across the great majority of partner-country culinary programmes. By anchoring integration to areas that already occupy

timetabled hours and assessed learning outcomes, the framework avoids requiring institutions to create new curriculum space, which focus group participants in every partner country identified as the single greatest practical obstacle to adopting externally produced VET resources. The second principle is resource-to-function mapping rather than resource listing. Each FOOD4ALL output – the thematic learning modules, the five online courses, the awareness materials, and the interactive activities – is assigned a specific pedagogical function within each curriculum area, following the constructive alignment logic established in Chapter 4: a resource is positioned according to what learning outcome it serves, not merely according to its topic. This prevents the common implementation failure in which trainers receive a catalogue of materials but no guidance on when, why, or in what sequence to use them. The third principle is assessment continuity. Every pathway closes with assessment approaches that extend, rather than duplicate, the assessment instruments already in use within that curriculum area, since focus group evidence indicated that trainers are considerably more willing to adopt new content when it can be evaluated through familiar assessment formats – observation checklists, practical demonstrations, portfolios – than when it requires constructing an entirely new evaluation regime.

The remainder of this chapter operationalises these three principles through six implementation pathways, one for each curriculum entry point, followed by a set of ready-to-use integration scenarios and a statement of the competence outcomes that the framework as a whole is designed to produce. Each pathway follows an identical internal structure – a short rationale for why that curriculum area constitutes a suitable entry point, the primary FOOD4ALL resources associated with it, a table of concrete integration activities mapped to expected learning outcomes, and a corresponding set of assessment approaches – so that trainers and curriculum coordinators can move between pathways without needing to learn a new format for each one. The chapter concludes with guidance on how the six pathways relate to one another sequentially and how their relative weighting should be adjusted to reflect differences in how partner-country VET systems distribute instructional time between classroom-based and work-based learning.

## **Purpose of the Roadmap**

Culinary VET programmes across the FOOD4ALL partner countries share several common characteristics, confirmed independently by both the documentary review conducted for the A2 national training landscape reports and the lived professional experience reported by trainers during the A3 focus group consultations. Without exception, these programmes place strong emphasis on food safety, hygiene, practical kitchen training, and work-based learning, reflecting the regulatory requirement, common to all partner countries, that food handling competence be certified before a learner may work unsupervised in a professional kitchen. By contrast, topics such as allergen management beyond minimum legal labelling

requirements, structured dietary adaptation, plant-based cooking as a distinct culinary competence rather than an occasional menu item, cultural and religious dietary diversity, and sustainability in ingredient sourcing remain only partially addressed in most national curricula and are entirely absent from several of them. This is not a matter of curriculum designers overlooking these topics; rather, the A2 analyses found that national qualification frameworks were largely formulated before the professional salience of these competences became as pronounced as it is in the contemporary hospitality sector, and revision cycles for vocational qualifications are typically long, often spanning five to ten years between substantial updates. At the same time, focus group participants across all five partner countries converged on a second, more immediately actionable obstacle: even trainers who recognise the professional importance of inclusive dietary competence report limited access to ready-to-use materials that would allow them to introduce it without requiring a formal, administratively burdensome curriculum revision, since most national VET systems require ministerial or accreditation-body approval for changes to formally specified learning outcomes, whereas the manner in which an existing outcome is taught and assessed in practice is left to institutional and trainer discretion.

The purpose of the roadmap is to provide a realistic and institution-friendly pathway for embedding FOOD4ALL resources within existing culinary programmes, operating deliberately within the space of trainer and institutional discretion over teaching method and material rather than within the space that would require formal qualification reform. Rather than creating additional stand-alone subjects – an approach that focus group evidence indicates would be rejected by the great majority of institutions on timetabling and accreditation grounds – the framework enriches current modules through targeted integration of FOOD4ALL learning resources, practical activities, and workplace-oriented learning experiences. In practical terms, this means that a trainer delivering a compulsory food safety unit is not asked to set aside separate teaching hours for an allergen module; instead, the allergen identification and cross-contamination prevention content already embedded in FOOD4ALL is delivered as an extension and deepening of the food safety unit the trainer is already required to teach, assessed through the same practical observation and demonstration instruments the trainer already uses, and recorded against the same learning outcome the qualification framework already specifies. The integration logic that follows in this chapter – expressed concretely through the six implementation pathways – is the practical expression of the constructive alignment and competence-based education principles established in Chapter 4: each FOOD4ALL resource is positioned not as new content but as a more complete realisation of a competence the institution already certifies.

The roadmap is built around six curriculum entry points commonly found in partner countries' culinary programmes, selected because the A2 landscape analyses confirmed their near-universal presence, in substantively comparable form, across the partner countries'

qualification structures, notwithstanding differences in national terminology, module sequencing, and credit allocation:

- Food Safety and Hygiene
- Basic Culinary Skills
- Kitchen Operations
- Menu Preparation
- Nutrition Basics
- Work-Based Learning

Together, these six areas provide sufficient curriculum space for integrating all FOOD4ALL thematic modules, online courses, practical resources, and assessment activities without requiring any single institution to adopt the framework in its entirety at once.

### FOOD4ALL Resource Architecture

Before turning to the six pathways individually, it is useful to set out the complete inventory of FOOD4ALL outputs and the pedagogical function each is intended to serve, since the same resource frequently recurs across more than one pathway and trainers benefit from understanding its primary purpose before encountering it in a specific implementation context. This mapping is not intended to be exhaustive of every possible use of a given resource; rather, it identifies the primary integration function for which each resource was designed and validated during the FOOD4ALL development process, leaving trainers free to identify secondary applications as they become familiar with the materials in their own teaching context.

| FOOD4ALL Resource                                                                    | Primary Integration Function                                     |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>Culinary Inclusivity Guide - Module 1:</b> Allergen Awareness and Dietary Safety  | Food safety, allergen management, cross-contamination prevention |
| <b>Culinary Inclusivity Guide – Module 2:</b> Holistic Health and Dietary Management | Health-related dietary adaptation and nutrition education        |
| <b>Culinary Inclusivity Guide - Module 3:</b> Plant-Powered Culinary Excellence      | Vegetarian, vegan and flexitarian culinary practice              |

| FOOD4ALL Resource                                                                      | Primary Integration Function                                |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <b>Culinary Inclusivity Guide – Module 4:</b> Diverse Dietary Approaches Exploration   | Understanding emerging dietary trends and specialised diets |
| <b>Culinary Inclusivity Guide – Module 5:</b> GlobalPalate Navigator                   | Cultural, religious and ethical dietary awareness           |
| <b>Online Course 1:</b> Innovative Recipe Development                                  | Recipe innovation and culinary creativity                   |
| <b>Online Course 2:</b> Menu Planning and Design                                       | Inclusive menu planning and menu adaptation                 |
| <b>Online Course 3:</b> Advanced Cooking Techniques with Cross-Contamination Awareness | Food safety and allergen-safe production                    |
| <b>Online Course 4:</b> Adapting Recipes in Practice                                   | Practical recipe modification                               |
| <b>Online Course 5:</b> Taste Testing and Quality Assurance                            | Sensory evaluation and quality control                      |
| <b>Awareness Materials:</b> Inclusive Menu Samples                                     | Authentic menu analysis and menu redesign activities        |
| <b>Awareness Materials:</b> Adapted Recipes                                            | Practical kitchen implementation                            |
| <b>Awareness Materials:</b> Comparative Statistical Infographics                       | Awareness-building and evidence-based learning              |
| <b>Awareness Materials:</b> Practical Visual Guides                                    | Kitchen support tools and procedural guidance               |
| <b>Interactive Activities</b>                                                          | Tests, revision and self-assessment                         |

## Implementation Pathway 1: Integrating FOOD4ALL into Food Safety and Hygiene Modules

Food safety represents the strongest entry point for FOOD4ALL integration because all partner-country programmes already include compulsory instruction in hygiene, food safety, and safe food handling.

### Primary FOOD4ALL Resources

- Guide: Allergen Awareness and Dietary Safety
- Online Course 3: Advanced Cooking Techniques with Cross-Contamination Awareness
- Practical Visual Guides
- Comparative Statistical Infographics
- Interactive Activities

### Integration Activities

| Activity                                | FOOD4ALL Resource Used   | Expected Outcome                                           |
|-----------------------------------------|--------------------------|------------------------------------------------------------|
| Allergen identification workshop        | Module 1 + Infographics  | Learners recognise major food allergens                    |
| Cross-contamination mapping exercise    | Course 3 + Visual Guides | Learners identify contamination risks in kitchen workflows |
| Allergen-safe workstation setup         | Course 3 + Visual Guides | Learners apply separation procedures correctly             |
| Kitchen safety simulation               | Interactive Activities   | Learners respond to realistic contamination scenarios      |
| Food information and labelling activity | Module 1                 | Learners understand allergen communication requirements    |

### Assessment

- Observation checklist during practical work
- Allergen identification quiz
- Cross-contamination risk analysis task
- Practical demonstration of safe preparation procedures

## Implementation Pathway 2: Integrating FOOD4ALL into Basic Culinary Skills Modules

Basic culinary skills modules provide the ideal context for introducing dietary adaptation and plant-based culinary practices.

### Primary FOOD4ALL Resources

- Plant-Powered Culinary Excellence
- Course 1: Innovative Recipe Development
- Course 4: Adapting Recipes in Practice
- Adapted Recipes

### Integration Activities

| Activity                                      | FOOD4ALL Resource Used            | Expected Outcome                                 |
|-----------------------------------------------|-----------------------------------|--------------------------------------------------|
| Plant-based ingredient substitution challenge | Plant-Powered Culinary Excellence | Learners explore alternative ingredients         |
| Vegan adaptation of a traditional recipe      | Course 1 + Adapted Recipes        | Learners develop plant-based alternatives        |
| Flexitarian menu item development             | Course 1                          | Learners create balanced alternative dishes      |
| Recipe adaptation workshop                    | Course 4                          | Learners modify recipes for dietary requirements |
| Comparative tasting activity                  | Course 5                          | Learners evaluate adapted dishes                 |

### Assessment

- Practical product evaluation
- Recipe portfolio
- Adaptation rationale worksheet
- Peer review and tasting evaluation

## Implementation Pathway 3: Integrating FOOD4ALL into Kitchen Operations Modules

Kitchen operations modules provide opportunities to connect inclusive culinary principles with authentic professional practice.

### Primary FOOD4ALL Resources

- Course 3: Advanced Cooking Techniques with Cross-Contamination Awareness
- Course 4: Adapting Recipes in Practice
- EthicalEats Handbook
- Practical Visual Guides

## Integration Activities

| Activity                                 | FOOD4ALL Resource Used | Expected Outcome                                              |
|------------------------------------------|------------------------|---------------------------------------------------------------|
| Allergen-safe production workflow design | Course 3               | Learners organise safe kitchen processes                      |
| Sustainable ingredient sourcing review   | EthicalEats Handbook   | Learners evaluate ingredient choices                          |
| Food waste reduction exercise            | EthicalEats Handbook   | Learners identify waste prevention opportunities              |
| Dietary adaptation during production     | Course 4               | Learners modify recipes while maintaining workflow efficiency |

## Assessment

- Kitchen workflow audit
- Sustainability checklist
- Practical production assessment

## Implementation Pathway 4: Integrating FOOD4ALL into Menu Preparation Modules

Menu preparation modules represent the most comprehensive integration point because they allow multiple FOOD4ALL themes to be addressed simultaneously.

## Primary FOOD4ALL Resources

- Course 2: Menu Planning and Design
- Inclusive Menu Samples
- GlobalPalate Navigator
- EthicalEats Handbook

## Integration Activities

| Activity                | FOOD4ALL Resource Used | Expected Outcome                                             |
|-------------------------|------------------------|--------------------------------------------------------------|
| Inclusive menu analysis | Inclusive Menu Samples | Learners identify strengths and weaknesses of existing menus |
| Menu redesign project   | Course 2               | Learners adapt menus for multiple dietary requirements       |

| Activity                             | FOOD4ALL Resource Used        | Expected Outcome                                              |
|--------------------------------------|-------------------------------|---------------------------------------------------------------|
| Cultural menu adaptation exercise    | Cultural Culinary Compass     | Learners accommodate cultural dietary preferences             |
| Religious dietary compliance task    | SacredPlates Compliance Guide | Learners adapt menus for Halal, Kosher and Hindu requirements |
| Sustainable menu development project | EthicalEats Handbook          | Learners incorporate sustainability principles                |

### Assessment

- Inclusive menu portfolio
- Menu presentation
- Case-study response
- Group project evaluation

### Implementation Pathway 5: Integrating FOOD4ALL into Nutrition Basics Modules

Nutrition modules provide the most appropriate context for addressing health-related dietary needs and emerging dietary approaches.

#### Primary FOOD4ALL Resources

- Holistic Health and Dietary Management
- Diverse Dietary Approaches Exploration
- Comparative Statistical Infographics
- Course 4: Adapting Recipes in Practice

### Integration Activities

| Activity                          | FOOD4ALL Resource Used                 | Expected Outcome                                        |
|-----------------------------------|----------------------------------------|---------------------------------------------------------|
| Dietary needs analysis            | Holistic Health and Dietary Management | Learners understand health-related dietary requirements |
| Diabetes-friendly meal adaptation | Course 4                               | Learners adapt recipes for specific conditions          |
| Low-sodium menu planning          | Holistic Health and Dietary Management | Learners apply dietary guidelines                       |

| Activity                            | FOOD4ALL Resource Used                 | Expected Outcome                          |
|-------------------------------------|----------------------------------------|-------------------------------------------|
| Comparative dietary trends activity | Diverse Dietary Approaches Exploration | Learners analyse different dietary models |
| Low-FODMAP adaptation workshop      | Module 4 + Course 4                    | Learners modify recipes accordingly       |

### Assessment

- Nutrition-based menu assignment
- Recipe adaptation project
- Dietary comparison worksheet

### Implementation Pathway 6: Integrating FOOD4ALL into Work-Based Learning

Work-based learning provides the strongest opportunity for transferring FOOD4ALL competences into authentic professional environments.

#### Primary FOOD4ALL Resources

All FOOD4ALL resources may be utilised depending on workplace context.

### Suggested Workplace Tasks

| Workplace Task                       | FOOD4ALL Resource Used            |
|--------------------------------------|-----------------------------------|
| Allergen risk assessment             | Module 1 + Course 3               |
| Dietary menu review                  | Course 2 + Inclusive Menu Samples |
| Recipe modification task             | Course 4 + Adapted Recipes        |
| Plant-based product development      | Module 3 + Course 1               |
| Sustainability audit                 | EthicalEats Handbook              |
| Customer dietary request analysis    | GlobalPalate Navigator            |
| Quality evaluation of adapted dishes | Course 5                          |

### Assessment

- Workplace mentor evaluation
- Learner reflective journal
- Practical task portfolio
- Workplace project report

## Ready-to-Use FOOD4ALL Integration Scenarios

The following scenarios illustrate how FOOD4ALL resources can be integrated into existing culinary VET programmes without requiring curriculum restructuring or additional standalone modules. Rather than presenting isolated activities, the scenarios demonstrate realistic teaching and learning situations that can be incorporated into food safety, culinary skills, menu planning, nutrition, kitchen operations, and work-based learning modules. Each scenario reflects the principles outlined throughout this handbook: constructive alignment, competence-based education, experiential learning, situated learning, and the before–during–after integration cycle.

### Scenario 1: Conducting an Allergen Audit in the Training Kitchen

Food safety and hygiene modules provide the most accessible entry point for introducing FOOD4ALL resources. In this scenario, learners are asked to conduct a systematic allergen audit of their training kitchen. Before entering the practical environment, learners complete selected activities from the *Allergen Awareness and Dietary Safety* module and review visual guides illustrating common cross-contamination risks.

During the practical session, learners inspect storage areas, preparation stations, utensils, labelling systems, and workflow organisation. They identify potential allergen hazards and propose corrective actions. Particular attention is given to separation procedures, cleaning protocols, and communication practices within the kitchen.

The activity concludes with a group discussion in which learners justify their recommendations and reflect on how small operational decisions can significantly influence food safety outcomes. Through this scenario, learners develop practical competence in allergen identification, risk assessment, and preventive food safety management.

### Scenario 2: Transforming a Traditional Recipe into a Vegan Alternative

Within basic culinary skills modules, learners frequently prepare traditional dishes using conventional ingredients. FOOD4ALL resources can be integrated by challenging learners to redesign a familiar recipe for vegan consumers while maintaining its sensory qualities and culinary identity.

Prior to the practical session, learners explore the *Plant-Powered Culinary Excellence* module and examine examples of ingredient substitutions presented in Course 1: *Innovative Recipe Development*. During the workshop, learners analyse the function of each animal-derived ingredient and identify suitable plant-based alternatives.

The emphasis is placed not only on replacing ingredients but also on understanding how substitutions affect flavour, texture, appearance, and nutritional value. Following preparation and tasting, learners compare the original and adapted versions and discuss the culinary decisions made throughout the adaptation process.

This scenario encourages creativity, critical thinking, and practical understanding of plant-based cooking techniques while demonstrating that dietary adaptation can be achieved without compromising culinary quality.

### **Scenario 3: Developing a Menu for Customers with Diabetes**

Nutrition modules often introduce learners to general dietary principles but rarely require them to apply this knowledge in authentic menu design situations. This scenario addresses that gap by asking learners to develop a complete menu suitable for customers living with diabetes.

Using resources from *Holistic Health and Dietary Management* and *Course 2: Menu Planning and Design*, learners evaluate ingredients, cooking methods, portion sizes, and menu composition, applying Glycemic Index (GI) and Glycemic Load (GL) metrics as core design parameters. They must justify how their choices — including specific ingredient selection, preparation techniques, and portion sizing — contribute to balanced nutrition and stable blood glucose management, using GI/GL values to support their reasoning quantitatively rather than relying on qualitative judgment alone.

The activity culminates in a menu presentation where learners explain their design decisions from both culinary and nutritional perspectives. The exercise highlights the relationship between health requirements and menu planning while strengthening learners' ability to translate dietary recommendations into practical food-service solutions.

### **Scenario 4: Adapting a Dish for Low-FODMAP Requirements**

As awareness of digestive health conditions increases, culinary professionals are increasingly expected to accommodate specialised dietary requests. In this scenario, learners work with a standard restaurant dish and redesign it for customers following a low-FODMAP dietary approach.

Learners first explore relevant content from *Diverse Dietary Approaches Exploration* before analysing ingredients commonly associated with digestive discomfort. During the practical phase, they identify suitable substitutions and prepare an adapted version of the dish.

The exercise encourages learners to move beyond simple ingredient replacement and consider how dietary modifications influence recipe structure, preparation methods, and customer experience. Reflection activities focus on the practical challenges of balancing dietary restrictions with culinary expectations.

### **Scenario 5: Designing an Inclusive Buffet Experience**

Menu preparation modules offer valuable opportunities for integrating multiple FOOD4ALL themes simultaneously. In this scenario, learners are tasked with designing a buffet suitable for a diverse customer population that may include vegetarian, vegan, lactose-intolerant, gluten-free, religious, and health-conscious consumers.

Using *Inclusive Menu Samples*, *GlobalPalate Navigator*, and *Course 2: Menu Planning and Design*, learners develop a buffet concept that incorporates variety, accessibility, and clear communication of dietary information.

Particular emphasis is placed on allergen labelling, menu balance, visual presentation, and operational feasibility. Learners must consider how food choices, signage, and service arrangements contribute to an inclusive dining experience.

This scenario reflects real hospitality industry expectations and demonstrates how multiple dietary considerations can be addressed simultaneously within a single food-service environment.

### **Scenario 6: Responding to a Customer Dietary Request**

One of the most realistic ways to develop inclusive culinary competences is through authentic customer-service situations. In this scenario, learners receive a simulated customer request involving allergies, intolerances, religious requirements, or specific dietary preferences.

Working individually or in teams, learners analyse the request, evaluate menu options, identify potential risks, and propose appropriate adaptations. They must then explain their decisions as if communicating directly with a customer.

The focus extends beyond food preparation to include professional communication, customer confidence, and responsible decision-making. This scenario closely mirrors situations commonly encountered in restaurants, hotels, catering operations, and institutional kitchens.

### **Scenario 7: Sustainable Menu Development Through Local and Seasonal Ingredients**

Sustainability increasingly intersects with dietary inclusivity in contemporary food-service settings. This scenario asks learners to design a seasonal menu that responds simultaneously to sustainability objectives and diverse dietary requirements.

Drawing on the *EthicalEats Handbook* and relevant FOOD4ALL resources, learners evaluate ingredient sourcing, seasonality, food waste reduction strategies, and menu accessibility. They are encouraged to consider how local and seasonal ingredients can support both environmental sustainability and inclusive culinary practice.

The final menu proposal is assessed not only for culinary quality but also for its ability to balance sustainability, affordability, nutritional value, and dietary diversity.

### **Scenario 8: Evaluating Adapted Dishes Through Sensory Analysis**

The final scenario focuses on quality assurance and reinforces the principle that dietary adaptation should not result in inferior culinary experiences. Learners prepare both an original dish and an adapted version designed for a specific dietary requirement.

Using FOOD4ALL sensory evaluation tools, they assess appearance, aroma, flavour, texture, and overall acceptability. The exercise encourages learners to identify strengths and weaknesses in their adaptations and consider how recipes can be further refined.

By linking dietary adaptation with sensory evaluation, this scenario reinforces a key FOOD4ALL principle: inclusive cooking is not simply about removing ingredients or avoiding allergens; it is about delivering high-quality culinary experiences for all consumers.

### **Cross-Pathway Implementation Considerations**

Although the six pathways are presented separately for clarity, in practice they are designed to be implemented cumulatively rather than in isolation. Institutions adopting this framework typically begin with Pathway 1 – Food Safety and Hygiene, since allergen and cross-contamination content is already compulsory across all partner-country curricula and therefore carries the lowest institutional barrier to entry. Once trainers and learners are familiar with FOOD4ALL materials through this entry point, Pathways 2 to 5 can be phased in across subsequent terms, culminating in Pathway 6, where competences developed across the preceding pathways are consolidated and transferred to authentic workplace settings. This staged sequencing reduces the perceived workload associated with curriculum change, a concern raised consistently by teachers across the focus group consultations, while still ensuring that the full breadth of FOOD4ALL content is eventually addressed.

Institutions should also note that the six curriculum entry points are not equally weighted in every national context. Where work-based learning constitutes a substantial share of programme hours, as is common in apprenticeship-based VET systems, Pathway 6 may be introduced earlier and used to reinforce competences from the classroom-based pathways rather than functioning purely as a capstone stage. Trainers are therefore encouraged to treat the sequencing proposed above as a starting configuration to be adapted to local timetabling, assessment calendars, and workplace partnership arrange

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