Building a Generation of Safe and Healthy Workers Project. Safe and healthy youth

Guide for the mainstreaming of

 Occupational Safety and Health in vocational training programmes
 Culinary arts

Nina Billorou and Jimena Sandoya

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The Project

The Project



Occupational safety and health (OSH) is critical when it comes to young workers, since they are the most vulnerable to both accidents and injuries at work as well as to diseases arising from occupational exposure.

According to national statistics¹, in Uruguay, 41.8 per cent of workers who suffered occupational accidents in 2014 were between 15 and 29 years old, and 45 per cent of the injured workers had been working less than two years (BSE, 2014). This means that those with less experience and qualifications suffer more accidents, in relative terms

A recent study found that for young workers who received OSH teaching at school, the occupational accident rate was 50 per cent lower than for young workers who did not .

In this scenario, training and awareness-raising on OSH among youth should be a priority for all the stakeholders and institutions related to

¹ Dates from the State Insurance Bank of Uruguay - BSE

education, in general, and vocational training, in particular.

Uruguay is one of the participating countries of the global project "Building a Generation of Safe and Healthy Workers. Safe Youth @work", executed by the ILO and funded by the US Department of Labor. One of the components of the project aims at strengthening the mainstreaming of occupational safety and health into vocational training.



ILO/Cinterfor (Inter-American Centre for Knowledge Development in Vocational Training. Its role in the project: responsible for the implementation of the advisory services (it is framed within the Global Strategy of the ILO's Safe Youth @Work Project).



INEFOP (National Institute for Vocational Training) created by Law No. 18,406 in 2008 as a non-state public entity. It has a tripartite conformation and its main task is to execute vocational training and workers' employment strengthening policies in Uruguay. Its role in the project: counterparty institution of the project.



FISE (Fundación de Integración Socio Educativa) is a non-profit private institution that since 2003 has developed vocational training courses in the culinary field for programmes for youth, women and workers under

Introduction

Introduction

The inclusion of OSH training into VT training programmes is commonplace. All the actors involved in training and work agree that it is in training processes where we should acquire knowledge, develop skills and internalize risk identification and prevention behaviours at work.

However, in most cases a generic approach is observed, focused on knowledge dissemination within a particular subject, a training module or concentrated in a number of hours devoted to the topic. This training takes place at the beginning or simultaneously with skills development, without a clear connection with the problems that participants face in learning situations and in work practice.

All the actors involved in training and work agree that it is in training processes where we should acquire knowledge, develop skills and internalize risk identification and prevention behaviours at work

It is actually essential to work with young people so that they understand that occupational safety and health is much more than just a boring set of rules and that knowing that the risks of every work process and how to prevent them is as important as acquiring and applying certain techniques or obtaining quality products.



For participants in training processes, in particular young people, to effectively adopt **safe and healthy work behaviours**, they must understand and value their importance, associate them and apply them in the different processes and moments of their work practice, know their rights and duties in this field and, most of all, identify and act to prevent the specific risks to which they are exposed to by developing OSH skills.

Practical guidelines:

What for? How did we build them? How can they be used?

3.1. What is the objective of these practical guidelines?

The objective of this material is to offer some practical guidelines to teachers to make their work in the field of OSH easier.

The guidelines and suggestions that are here systematized aim at mainstreaming the prevention of risks at work, the protection and the promotion of health into the culinary field, while also taking into account the particular features of the target audience: young people who are participating in educational processes.

These guidelines include:

- Identification of skills to be developed by participants.
- Methodological suggestions for mainstreaming.
- Analysis of work processes by identifying ris-

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ks, common errors and systematizing good practices.

- Examples of learning activities linked to different risks.
- A repository of resources to support training processes.

3.2. How did we build them?

The guidelines and solutions that are presented here are the result of observation, analysis and reflection upon the experience carried out by the training institution, FISE, in the culinary field. It is actually a cooking training course that was selected by INEFOP to implement this pilot experience within the Project. It is a training proposal aimed at workers under unemployment insurance benefits (both men and women), who have completed primary education, which may include young people over 18, although it is not an exclusive requirement.

The proposal is oriented to the culinary sector in general and, in particular, at healthy food, that is, for those who must follow a certain nutritional regimen due to suffering pathologies such as hypertension, diabetes, cholesterol, obesity, celiac disease, etc.

The course was selected based on successful criteria in terms of results (good performance in general of the training institution) and the demand by the labour market and the young audience. Indeed, although this training institution also offers bakery and confectionery courses, priority was given to the culinary course since it is the most demanded by the market and by young people.

The analysis and reflection process about good practices, and learned lessons was carried out by the institutional leaders and teachers and was complemented by the research and implementation of these advisory services.

It is worth mentioning that even though the starting point was the analysed course, the purpose of this document has been that the knowledge, considerations, suggestions and methodological strategies that are presented here transcend the specific experience and provide inputs and tools that can be enriched, transferred and adapted to other training proposals of the culinary field.

We believe that the most useful and relevant knowledge, learned lessons and good practices in the field of OSH training are those based on the experience and contributions made by the different actors involved: young participants, trainers, institutional leaders, state organisations, sectoral social partners, enriched by the help and research contributions by the authors. In such sense, this set of guidelines and tools is only a starting point, a proposal under construction, open to new contributions, experiences and revisions.

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3.3. How can they be used?

This set of guidelines and tools is not a Manual nor an exhaustive systematization of the available strategies and resources, it seeks to bring together and organize a set of considerations, strategies and resources of different kind, drawn upon the analysis of good practices, lessons learned in the framework of a specific training programme so that they are available to:

- trainer teams of the culinary field,
- curriculum designers,
- · institutional leaders, and
- vocational training policy makers.

In all cases, it must be pointed out that this paper is an input to include OSH issues in the vocational training agenda, by providing tools and resources so that trainer teams use them according to the needs and characteristics of the participants, adapt them, contextualize them, combine them and collectively suggest new settings.



Structure of contents

Structure of contents

Apart from chapters **1, 2, 3, and 4**, which are an introduction, in chapter **5**, some general concepts about the meaning of mainstreaming, and how it can be put in practice in competency-based training, are presented.

In chapter **6**, the characteristics of young people in relation to risks are analysed and, in chapter **7**, there is a presentation of the skills that participants of a training programme focused on cooking should develop during the training process. In chapter **8**, the suggested methodological sequence for mainstreaming, as well as the learning activities choice, is developed.

In chapters **9** the work process in the field of cooking is analysed in detail for every stage of the process, considering the most common risks and errors to be prevented, the good practices and standards to cover in training, while chapter **10** includes the global risks and good practices of

the process as a whole.

Chapter 11 provides general recommendations for mainstreaming and skills development on OSH, good practices and learned lessons identified for the study.

A series of learning activities for skills development on OSH, as well as a repository of support materials for trainers and participants, respectively, are presented in chapters **12 and 13**.

Finally, the mainstreaming strategy applied to this particular training programme is exemplified in chapter **14**.

What does it mean to mainstream OSH into training?

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The term cross-cutting, or mainstreaming, refers to something that passes through or traverses an object from one side to the other. As for curricula, mainstreaming is a strategy whereby certain drivers or topics that are considered key or priority are present throughout the programme, permeating all the specific subjects, modules and/or projects.

Mainstreaming OSH into training means considering that, in order for young people to develop the skills of caring for themselves and others, it is necessary to integrate this perspective in all learning situations. Incorporating the topic and the practices in each and every one of the specific technical skills so as to permeate the whole programme.

Mainstreaming OSH into vocational training is a strategy to ensure that safe and healthy work becomes a key objective and dimension in the design, implementation and evaluation of training programmes and practices and thus clearly contribute to building new generations of safe and healthy workers.

It is actually not an end in itself, but a means of

Mainstreaming OSH into training means considering that, in order for young people to develop the skills of caring for themselves and others, it is necessary to integrate this perspective in all learning situations.

facilitating and consolidating the development of OSH skills by the participating youth.

Like any training strategy, however, it cannot guarantee the results it sets out to achieve on its own. For this strategy to become operational, the different actors involved (public policy

makers responsible for training policies, training institutions, teams of trainers, tutors in companies, students) must be committed to the approach.

In particular, it is necessary to adopt an integrative

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approach at the different stages and products that are part of the design processes and training implementation. This implies that OSH is present in:

- occupational profiles that are the reference of curriculum design (OSH skills),
- the curriculum, linking OSH skills to each stage of the work process, to the labour context, to each module and teaching unit,
- the implementation of the programme, its planning and teaching practice, to ensure that facilitators pay ongoing attention to the subject, both from reflection and content and from performance during learning processes,
- training materials: both specific on the subject and including this dimension in all support materials,

- the formative and summative assessment of learning, so that the practices and knowledge linked to safe and healthy work are considered and required at the same level as the learning of technical skills,
- the learning environments, which should be an example, offering the best conditions from an OSH perspective,
- apprenticeships or professional practices, that must be opportunities to learn good practices in this field.

It is worth noting that mainstreaming OSH into the curriculum, that is, an integrative and transdisciplinary approach, does not imply eliminating specific spaces devoted to the topic. On the contrary, the **occupational safety and health** subject must not only be maintained but also strengthened, as it enables awareness raising, presenting and clarifying conceptual aspects.

Finally, it is worth mentioning that all this will be possible as long as there is a team of committed trainers to lead it. We will refer to trainer/teacher teams throughout this booklet since mainstreaming cannot be done by every trainer in isolation. Mainstreaming OSH involves collaborative work, permanent coordination among trainers, with the support of institutional managers and a joint project approach to be developed from the spaces that are part of the training programme.

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Training and the youth

Training and the youth

Competency Based Training (CBT) seeks to develop a dual relevance approach, that is, capable of catering to both the demands of a world of work and to the diverse needs of individuals that learn and have heterogeneous characteristics and starting points.

The first step to determine the effective objectives and strategies in the field of training for OSH is identifying and analysing the risks to be faced and the skills to be developed as well as the problems arising from incorporating good practices into work.

Thus, once the problems and specific skills to be developed are identified, it is necessary to determine the most suitable training solutions considering the profile of participants, in this case, young people. The first step to determine the effective objectives and strategies in the field of training for OSH is identifying and analysing the risks to be faced and the skills to be developed as well as the problems arising from incorporating good practices into work.

It is essential to ask ourselves how young people learn, what interests them and how they position themselves regarding the potential risks they may be exposed to at work.

One of the issues to consider, and which has been extensively analysed in recent times, is the relationship of adolescents and young people with risks

Dr. Silvia Bunge (University of Berkeley) indicates that young people "dismiss dangerous situations" and identifies three aspects that can affect their behaviour: changes in the brain, the role of hormones and the influence of context and peers. Indeed, young people undergo a stage of significant changes which is decisive in the acquisition and development of skills for life and work, including caring for oneself and others. In effect, young people can be very open to integrating new behaviours, provided that the environment (training and work) promotes these behaviours through strategies that arouse their interest, move them and give sense and meaning.

Learning processes are individual and group experiences, that depend on previous knowledge and the ability to relate new information to experience, the willingness to learn, and the Learning processes are individual and group experiences, that depend on previous knowledge and the ability to relate new information to previous knowledge, the willingness to learn, and the young person's perception of the value and meaning of what they learn.

young person's perception of the value of what they learn and the interest they have in their work and life

In this scenario, the curriculum must respond to the objectives to be defined, based on the development of OSH skills and also to the needs, perceptions and interests of young people in order to achieve meaningful learning opportunities that translate into safe and healthy work behaviours.



Which OSH skills should young people develop?

Which OSH skills should young people develop?



OSH skills to be developed by students of the culinary training programme

	Identifying risk factors in the different work processes and spaces, and their possible consequences for safety and health.	 Identifying the risks to safety and health for each work process. Identifying the possible consequences of an accident according to the risk. Identifying the worker's rights and duties in the field of OSH.
Managing risks to the occupational safety and health	Taking preventive measures to avoid risks to OSH.	 Using the tools, equipment, clothing and machines in safe conditions. Wearing required protective equipment. Carrying out the activities complying with established safety and health regulations and procedures. Keeping the conditions of hygiene and safety in the work space. Warning/correcting own actions or someone else's actions to prevent an accident.
	Promoting safe and healthy work among team members.	 Paying attention to and promoting OSH among colleagues. Making suggestions for improvement to their manager or the organization where they work.
	Timely intervening in risk or accident situations to themselves and others at work.	 Having information to act in case of an accident (locate first aid kit, perform first aid and steps to take before the competent authorities). Acting in a timely and appropriate manner in case of an accident.

It is worth noting that the OSH skills identified are those related to the protection of workers, the team of colleagues and the working environment. The set of skills relating to food handling or the hygiene practices that are specific to the culinary profession are not covered here.

The methodological sequence

The methodological sequence

In order to mainstream OSH into the design of training, the following methodological sequence was followed:

- Diagnosis analysis of current programmes
- Consultation with diverse sources

Identification of skills to be developed

Analysis of work processes

- Risks
- Common errors
- Preventive measures and good practices
- Regulations

- Revision of objectives
- Learning activities according to risk
- Evaluations

Curriculum design (mainstreaming

Support Materials

- Repertoire
- Guidelines for the development of new teaching materials

First, the skills to be developed by the participants, considering their occupational profile (main functions) and the scope of the training offer, were defined.

As a second step, an in-depth analysis was done, including the OSH aspects connected to each of the work processes and stages that structure the work in the kitchen and which are mainstreamed into the training programme. This analysis enabled the identification of present risk (skill 1), preventive measures and regulations (skill 2), the

most common errors (partially skill 3 and skill 4).

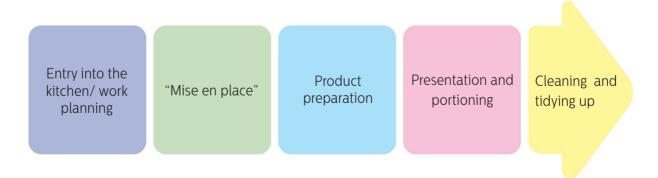
The curriculum design was then analysed to mainstream OSH into it. The specific objectives were revised, introducing OSH care in an explicit way; the learning activities were set and the evaluation guidelines were identified. Finally, the available materials to develop the skills (repertoire), and some guidelines for the design / development of new teaching materials, were sought.



Risks and preventive measures according to the work process

Risks and preventive measures according to the work process

Five processes that are carried out sequentially and replicated for the various techniques and recipes used in the programme can be identified in culinary studies:



The analysis of the risks, preventive measures and common errors for each work process is the starting point for identifying the contents, learning situations and activities to be carried out.

9.1. Summary table

Work process: Entry into the kitchen / work planning				
Risk factors	Preventive measures	Common errors and accidents	Safety standard or procedure	
Falls Temperature changes	In this stage, all tasks are focused on prevention: Remove rings or earrings. Tie back hair. Wear appropriate clothing and shoes: Wearing clothing with long, loose fitting sleeves, which can inadvertently contact a flame or catch on a hot container, is not recommended. Wear personal protective equipment: Head and face protection (hat or cap). Respiratory protection (gloves). Foot protection (closed leather shoes with slip-resistant rubber soles). Body protection (waterproof apron, cold room jacket, cotton pants with pockets, short-sleeved shirt with collar). Check the facilities: before starting work in the kitchen, all cooking and storage equipment, the electrical system (each stove on a separate outlet, do not use one outlet for more than one appliance), and the water and gas connections should be checked. Before entering the cooling chamber, anticipate what materials you will need in order to avoid remaining for extended periods of time (should not remain for more than 10 minutes).	 Poor personal hygiene. Not removing rings. Wearing inappropriate clothing may cause accidents in the following work stages. 	Occupational safety and hygiene rules Decree No. 406/988 of 3 June 1988, Art. 1. Hand protection, Art. 14; foot protection, Art. 15 and 19; Working clothes: Arts. 24, 26 and 27 Art. 24. Clothing that is appropriate for each task you are performing in good condition and clean. If there is a possible risk of pull-in, wearing loose-fitting clothing and other clothes such as ties, scarves, bracelets, necklaces, rings, etc. is forbidden. Art. 49. Before beginning work, operators shall check all elements subject to stress and shall report any anomaly they may find to their supervisor.	

"Mise en place"				
Risk factors	Preventive measures	Common errors and accidents	Safety standard or procedure	
1. Fall from the same level or to a different level (using stairs, stools, etc.)	To prevent falls of people or objects: It is essential to keep workplaces clean, cleaning up spills as soon as they occur. Do not enter rooms if the lights are off. Do not leave boxes, carts, etc. in walking areas or evacuation areas (exits).	Use ladders incorrectly to access shelves or the upper parts of pantries, with the consequences for workers being: fractures, injuries, head trauma and loss of consciousness.	Decree 423/007 of 12 November 2007 - Maximum loads. Establishes that the weight of sacks of flour, sugar, rice and those containing produce may not exceed 25 kg, unless mechanical means are	
2. Falling objects during handling, striking against objects	 To prevent falls to a different level: Do not use chairs or similar equipment to access cabinets, shelves or pantries. Always use ladders to get supplies and check to ensure it is in good condition. Face the ladder when climbing up and down, always holding on to it with both hands. Avoid going up or down the ladder with heavy objects or full hands. Avoid transporting or handling heavy loads using a ladder if the weight and size of the load can compromise your safety. Every time you need to get a heavy object from a high place, seek assistance from a coworker. 	 Injuries from falls/objects broken during handling, striking against objects. Improperly lifting heavy loads. Cuts (e.g., when preparing an ingredient by cutting a piece or package). 	available for carrying them.	
3. Overexertion/ load lifting	 To prevent overexertion: As far as possible, eliminate the need to handle heavy items (use rolling stands to move gas cylinders, break down very heavy packages of food). Before lifting a load make sure the hands, the load and handles are not slippery (wear appropriate gloves). Handle loads correctly and when handling heavier items resort to several people. Mind the body posture when lifting loads: put your feet around the load, with your body over it (if this is not feasible, try to get your body as close as possible). Bend your legs when lifting. Keep your back straight. Pull the load as close as possible to your body. Lift and carry the load with straight downward turned arms. Avoid keeping the load above your shoulders or below your knees. 			
4. Cut	To prevent cuts: Never carry knives with the tip forward, always handle knives with the tip pointed down. Do not become distracted while using sharp utensils.			

Product preparation				
Risk factors	Preventive measures		Common errors and accidents	Safety standard or procedure
1. Handling fire or hot substances.	 General: Concentration, pay full attention/be alert. Avoid distractions: no music (except soft ambient music), no cell phones. Tell coworkers if you are going to handle something that may put others at risk (for example, moving with a hot pot or baking sheet, someone may bump into the oven door when it is open). Similarly, suggest coworkers to warn about their movements if they do not do it at their own initiative. Prevention of burns: Do not allow children in the preparation area. Do not keep matches or lighters within the reach of children. Always place pans on the burner that is further away from you. Do not leave pans or containers with hot oil in accessible locations. When grabbing hot containers, use a dry kitchen towel or dry fabric gloves to protect your hands. To avoid burns from steam, keep your face away when opening pots with hot foods. The lid can be used as a shield. Only fill containers up to three quarters of capacity. Transfers of hot liquids and the addition of the components of the different dishes shall be carried out as slowly as possible. Do not bring objects that can burn easily (paper, plastic, fabric, etc.) close to the flames. Do not take fire from one place to another. Avoid water splashes in pans and pots containing oil, by removing excess water from foods and avoid heating oil to high temperatures. Place food in the oil very slowly and using tongs. Prevent possible explosions in gas ovens (always make sure to turn off the burner or oven when it is not being used). Inform when handling a hot load, ensuring everyone takes precautions. To avoid burns from steam, turn your face away before opening pots and pans with hot liquids. 	•	Not warn coworkers or not be warned by coworkers when moving hot objects. Burns	Each appliance has instructions with specifications that must be followed when using it. Art. 145. Workers shall receive precise instructions on the correct use of the tools they need to use in order to prevent accidents, and in no case may they use them for purposes other than those intended. Hand tools shall be tempered, conditioned and repaired only by properly qualified people. Art. 150. The design and weight characteristics must be appropriate for the cutting operations to be carried out and knife handles must have ferrules or grips to prevent the hand from slipping. Chapter V Ergonomic Risks. Arts. 48, 49, 50, 51, 52, 53, 55. Decree 62/83 of 1 March 1983 - Food Handling

Product preparation			
Risk factors	Preventive measures	Common errors and accidents	Safety standard or procedure
2. Thermal risk.	Prevention of thermal risks: Wear light, flexible clothing and stay well hydrated.		
3. Overexertion/ load lifting. Ergonomic problems.	Prevention of ergonomic risks: Lift loads following the procedure indicated above (product preparation). Do not work with your torso bent. When using knives or other kitchen utensils, keep wrists in a neutral position, bending them as little as possible.		
4. Falls.	Prevention of falls: Do not run in the kitchen. Do not step on wet surfaces. Place foods out of the traffic area. Report any damage seen in the floor and request repairs. Keep workplaces tidy and clean, cleaning up spills as soon as they occur. Keep exits and traffic areas free of obstacles. Wear flat, slip-resistant shoes.	Falls from stairs. Falls on the same level (may cause fractures, blows, sprains, strains, etc.): stepping on objects, tripping on materials from the work process, wet floors or damage to the floor, bumping into coworkers who share the work space can cause said falls, or falls due to the fact that floors may be covered in slippery substances (fat or food scraps) or wet. Cuts.	
5. Cut (with sharp utensils or machines).	 Prevention of cuts: Never carry knives with the tip forward, always handle knives with the tip pointed down. Do not become distracted while using sharp utensils or any kind of pointed objects (knives, screwdrivers, scissors, peelers). Keep knives properly sharpened. Do not use them to point or make sudden movements which may harm someone. Store knives with the sharp edges and tips covered or pointed down. Do not carry them in pockets. Do not use those with splintered handles, or those whose bland and handle are not securely attached. Never become distracted while handling automated equipment (slicers, grinders, mixers, etc.). Always disconnect machines when they are not being used, and even during cleaning sessions. Never try to catch a falling knife (step back and let it fall). When opening a can hold the sides firmly. Once open, handle the can with caution, since the edges are as sharp as a knife. 		

Product preparation				
Risk factors	Preventive measures		Common errors and accidents	Safety standard or procedure
6. Fires.	 Prevention of fires: The proper way to turn on a burner is as follows: The ignition source (match, lighter, etc.) is brought close to the burner and then the gas valve is opened. Check to see if the flame in the appliances is blue. If the flame is of a different colour (yellow or orange), it is not working properly and is producing abnormal amounts of carbon monoxide. A professional must be called immediately. Always keep the space well ventilated. Avoid heating the space with the oven or stove burners. In case of a gas escape: do not use electric switches, do not light lighters or matches, close the shut-off valve and ventilate the area. Immediately inform the maintenance service. In case of fire in a gas installation, the supply must be cut off. If there is an incipient fire which has not spread more than 1m both horizontally and vertically, it is safe to perform manual extinguishing actions. When fire exceeds these dimensions, we are in the presence of a fire and it is not safe to perform manual extinguishing actions. 	•	Not shutting the gas off completely. Boiling liquids can overflow the containers, which may put out the burner flame and cause a gas escape. Gas explosions or fire.	

Presentation and portioning			
Risk factors	Preventive measures	Common errors and accidents	Safety standard or procedure
Handling of sharp objects and hot objects.	Prevention of burns, falls and cuts as in the preparation stage.	Possible cuts when portioning preparations. Burns when removing preparations from burners or the oven (in the forearm when using large baking sheets). Improper posture.	Food security standards. See: Practical guide for the application of Sanitation Standard Operating Procedures of the Municipality of Montevideo (IMM).

Cleaning and tidying up			
Risk factors	Preventive measures	Common errors and accidents	Safety standard or procedure
Risks resulting from the use of chemicals (they may case injuries from contact burns, splashes, splashes to the eyes, inhalation of harmful, corrosive and irritant fumes to the person handling	 Manipulation of chemical products: Before using any detergent or disinfectant, read the directions for use carefully and follow the safety recommendations included in the product label. Avoid using cleaning products with chemicals (they end up being contaminants and are harmful for consumers and the person preparing foods, and they are not allowed in some preparations, such as chocolate). Avoid splashing of substances, especially to the eyes, if splashing occurs, wash with abundant water without rubbing. Waste must be collected in appropriate containers that prevent possible spills and emanations. Containers of cleaning products must be kept well closed and stored in places where they do not get mistaken for cooking ingredients. They must be kept in their original containers, when possible. Adequately label cleaning materials and avoid using container that may lead to confusion. Never transfer cleaning products to containers intended for food. Tidying up and cleaning: If shelves are used, place the heaviest materials in the lower sections. Emergency exits, walkways, extinguishers, doors and stairs must have signs, be well-lit and clear from materials such as boxes, supplies, equipment, machines which may obstruct the path and make it difficult to use in case of emergency. If there are many people working in the kitchen it is convenient to mark freshly cleaned areas with signs. Report and request that burned out light tubes or bulbs be replaced. Ensure they are clean in order to avoid blocking the light. When cleaning knives or other sharp objects, do not clean directly the sharp edge and place it on a flat surface. Clean one side first and then the other. When cleaning the blade, do not submerge in soapy water, but rather hold it by the handle. Keep the fridge and freezer tidy to avoid food spills or scattered food. Using a slip-resistant mat on the floor, in front of the sink,	Chemical poisoning. Using cleaning products with chemicals can be as bad or as toxic as not washing. There is a lot of ignorance, which is harmful to consumers and cooks. Mislabelling of bottles with products.	Art. 61: Detergents shall be preferably used as cleaning or degreasing products. When using cleaning agents which are combustible, flammable or harmful to the health of workers is required, safety measures must be taken according to the nature of the product. Art. 99: The first aid kit must include the supplies detailed in the regulations. Prevention of fires and explosions Art. 11: There must be an organized emergency plan in place for any situation of accidental or emergency exposure to chemical, physical, or biological agents, which may affect workers or the public at large, with serious consequences. In order to avoid potential accidental exposures, empty containers of these products must be destroyed or treated to neutralize its effects.

Risks and preventive measures in the set of work processes

Risks and preventive measures in the set of work processes

Psychosocial hazards are the result of the design and management of work and its social and organizational contexts, all of which can cause psychological or physical harm.

In general, the pace and demands involved in these kinds of services must be taken into account for all culinary work processes. Moreover, on specific occasions, the pressure the demands, deadlines and tasks to be performed place on workers can result in a certain degree of stress.

Work-related stress can cause momentary distraction, errors of judgement, or failure in the performance of normal activities, increasing the risk of workplace accidents. It can contribute to the development of mental disorders (burnout and depression) and other physical problems (cardiovascular diseases and MSDs), as well as negative coping behaviours (alcohol abuse

In general, the pace and demands usually involved in these kinds of services must be taken into account for all culinary work processes. Moreover, on specific occasions, the pressure the demands and tasks to be performed place on workers results in a certain degree of stress.

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Planning work as much as possible before starting is recommended in order to mitigate these situations.

or smoking). Consequently, stress results in a deterioration of well-being and quality of life for workers (ILO, 2016a).

Because young people continue to develop into their mid-twenties, mentally, emotionally and socially, their exposure to psychosocial hazards can be especially harmful.²

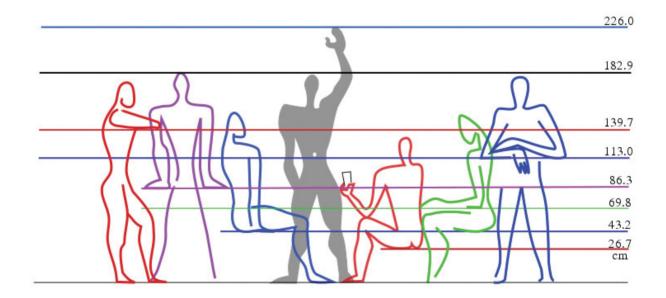
Planning work as much as possible before

starting is recommended in order to mitigate these situations.

Awkward postures and/or constrained postures during the course of the working day lead to many musculoskeletal problems.

Most of the activities carried out in the kitchen involve standing while working. Working in a standing position on a regular basis can cause sore feet, swelling of the legs, varicose veins, general muscular fatigue, low back pain, stiffness in the neck and shoulders. Excessive standing also can later lead to rheumatic diseases.

Whenever possible, the tasks to be performed should be rotated in order to prevent problems.



² ILO. 2018. Improving the Safety and Health of Young Workers. Geneva.

It is important to have rest periods during the training process, and for participants to understand its relevance and how they should be used. Trainers must explain that rest periods should be used to relax tired muscles and make certain movements, to walk when the workspace limits the change of position, etc. It is also key for young people to know that they must report ailments, discomforts and emerging problems during work, so that working conditions can be improved and corrected.

Awkward postures and/or constrained postures during the course of the working day lead to many musculoskeletal problems. It is important to have rest periods during the training process, and for participants to understand its relevance and how they should be used.

Whenever possible, the tasks to be performed should be rotated in order to prevent problems.

Even though the actions of apprentices must be continuously monitored by trainers during the learning process and, afterwards, during the exercise of their occupation by supervisors, so that they may, based on their experience and caution, avoid and prevent occupational accidents when possible, it is essential for young people to be aware of the relevance of the care of OSH for them to act constantly avoiding risks.



General recommendations. Good practices and lessons learned.

General recommendations. Good practices and lessons learned.

In order to mainstream OSH issues in learning processes, this approach needs to be integrated into the organizational life of training institutions in such a way that apprentices and educators work together to make the training institution a safe and healthy place to work and learn, through:

- education on risks and OSH management, for example, by having students participate in risk prevention and hazard identification;
- the promotion of dignity and respect for all, for example, with campaigns to promote equality at work and against mobbing;
- the concern about the environment, for example, about the responsible use of supplies, recycling and reusing.

The risk prevention and OSH care approach needs to be integrated into the organizational life of training entities in such a way that apprentices and educators work together to make the training institution a safe and healthy place to work and learn.

The experiences analysed show the good practices and some lessons learned about the different aspects of the design and implementation of vocational training geared toward young people.

With regard to the occupational profile and graduate profile:

The occupational profile is identified from the reality of the world of work, usually in consultation with social partners (employers and workers and their organizations) and it includes skills that are key to the professional performance. Experience shows, however, that actors in the world of work do not always mention OSH skills or environmental care skills spontaneously among the required skills.

At the training institution reviewed, written evaluations include questions on health, hygiene, safety.

It is fundamental that OSH skills are explicitly included in the occupational profile.

In this way, OSH skills will be considered in the graduation profile and, consequently, addressed in the curriculum and evaluated.



With regard to curriculum design:

Mainstream OSH objectives and content in the design of the training programme. This implies coordinating what the safety and health specialist teaches with the knowledge imparted by the cooking workshop teachers. This articulation entails the necessary contextualization of concepts regarding the work practices. It also involves, as far as possible, having shared work sessions (where the OSH specialist participates jointly with the cooking teachers), providing ongoing feedback to participants as the work processes take place and the associated risks are revealed

It is advisable to have two teachers per class simultaneously during practical training sessions in the kitchen, in order to ensure each student is permanently aided and monitored. If there are two teachers, one can always pay attention to OSH aspects (anticipating risks and hazards, monitoring compliance with safety and health standards and measures, warning and teaching students based on successes and errors).

At the training institution reviewed, work in the kitchen takes place with two teachers, who observe and provide permanent feedback on the performance of participants, both regarding technical aspects and OSH.

With regard to methodology:

For young participants to be interested in learning and developing their OSH, it is advisable to apply active methods that are also attractive, hands-on and meaningful: instead of theoretical classes, implementing practical exercises, watching videos, conducting drills, learning visits, testimonials and internships.

For young participants to be interested in learning and developing their OSH, it is advisable to apply active methods that are also attractive, hands-on and meaningful: instead of theoretical classes, implementing practical exercises, watching videos, conducting drills, learning visits, testimonials and internships.

It is also key to make participants responsible for their own care, and that of the team, in OSH matters, and to train them in risk detection and the integration of safe and healthy work practices.

For example, activities can be implemented in groups aimed at identifying risks and developing proposals for improvement in real settings, such as:

going on tours, examining the conditions

- of the workplace in order to verify that they comply with the relevant regulations, documenting practices and making proposals,
- during performance, conducting a peer review and giving feedback to peers,
- preparing a brief talk or presentation on risks before starting work on a particular process³,
- designing and making posters to illustrate risks or exemplify incorrect vs. good practices,
- playing (and recording with photos or videos) role-play games simulating accidents and appropriate interventions (e.g. falls, fires, etc.),
- making videos or presentations to explain and train peers on the use of equipment or safe practices, among others.



³ See the SENATI example on distraction.

The teaching staff:

Training centres should take occupational risk prevention as a major part of comprehensive students training and, thus, should bear in mind that for this to be possible, trainers must be aware of and properly trained in OSH.

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"leachers may know a lot about the product or technique, but they may not be very aware of prevention aspects. Details of the kitchen... teachers sometimes do not have information about certain things which may not be good for safety in a kitchen." (Headmistress at training institution)

As mentioned above, mainstreaming requires trainers to work as a team to address OSH issues together, from different perspectives, in a coordinated and articulated manner.

This implies providing spaces and times for trainers to coordinate their work, as well as promoting a culture of collaborative work, focused on the needs of participants and not on the logics of each subject or specialty.

Working as a team entails considering the need to view learners from a holistic perspective, paying attention to what happens to them. In

> Mainstreaming requires trainers to work as a team to address OSH issues together, from different perspectives, in a coordinated and articulated manner

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learning processes, especially regarding OSH, emotional state strongly influences the lack of attention to potential risks. It is essential to timely detect anything that may be interfering with concentration and care practices in participants, which requires a holistic approach.

In practices and/or internships at enterprises:

In the training proposals that include practices, internships in workplaces, alternation modalities or dual training, trainers must be instructed before-hand to make sure they are aware of their responsibility in the occupational risk prevention among the young participants they are tutoring.

For this, trainers must also be trained in occupational risk prevention and prepared to carry out adequate supervision, observing, assessing and evaluating the safety of young people's practices.

"Teachers work in permanent coordination and if any of them identifies difficulties or situations which may interfere with the learning process of a student, they contact their colleagues so that each of them can address it." (Person in charge at training institution)



Examples of learning activities according to the type of risk

Examples of learning activities according to the type of risk

Risk analysis and preventive measures for each work process

The following can be used for analysing each work process (entry into the kitchen, mise en place, product preparation, presentation and portioning, and cleaning) by type of risk and errors frequently made in the kitchen.

- Case studies.
- Educational visits to kitchens with guided tours.
- Projects on preventive measures for a restaurant or kitchen.
- Research project on the main kinds of accidents in kitchens which graduates from the training institution have joined (surveys to graduates).
- Research on the accident rates in the sector, according to available data from the National

Insurance Bank (BSE).

- Preparation of a project in which participants make suggestions and explain the basis for the OSH regulations of an establishment (cafeteria, restaurant, ship kitchen or whatever they choose).
- Analysis of cooking contest shows or other kinds of shows where they can analyse OSH as a transversal aspect in one episode.
- Preparation of awareness materials on risks, preventive measures (posters, leaflets, videos, PowerPoint presentations, etc.).

Falls

- Analysis and discussion based on videos, photos. Reflection based on observations (events that take place and cause accidents in the workplace, what should they do to avoid said risk, what are the consequences of their actions).
- Interviews to specialist doctors (for example, from the National Insurance Bank, BSE).

Cuts

- Practical lessons on the use of all kinds of knives, sharpening, handling and prevention recommendations for handling.
- Videos

Overexertion/load lifting

· Role-play.

Handling fire or hot substances

- Observation of photos, videos.
- Practical lessons.

Risks resulting from the use of chemicals

- Simulated purchase of cleaning products.
- Application practices.

Risk of skin injuries for not wearing PPE

Observation of photos, videos.

Fire

- Practical training on the handling and use of portable fire extinguishers.
- Review of escape routes and exits, as well as signage and access to extinguishers, hydrants, electrical panels, etc.
- Evacuation drills.

First aid training

- For each type of risk, discuss with students the reaction or procedure they should follow in case of accident or emergency. For example, what to do in case of a burn, what healing products to use, etc. or what to do in case of a cut with kitchen equipment. The trainer teaches how to help someone in case of an accident
- Reading and discussion of information leaflets about the regulatory framework and where to turn to in case of accident.

Repository of support materials for including OSH in training

Repository of support materials for including OSH in training

Teaching materials could be any kind of device designed and made for the purpose of facilitating the learning process.

They are, as mentioned before, the resources teachers rely on to facilitate and guide the learning process of participants (books, posters, maps, photos, prints, videos, software, texts, content handbooks, handbook of learning activities, etc.).

Trainers identify and prepare teaching materials to plan their courses, as vehicles and support for facilitating the development of skills by participants.

For teaching materials to be effective and foster a successful learning setting, they must take into account:

- The skills to be developed.
- The problem situations in the professional environment that need to be solved.

- The contents (conceptual, procedural, attitudinal) that will be covered using the materials.
- The characteristics and interests of participants.
- The characteristics of the context (physical and curricular in which the teaching takes place, and where we plan on using the teaching material selected).
- The teaching strategies in which the materials can be introduced.

The materials to be used with students will always be selected based on the context, within the design of a specific educational intervention, considering all of these aspects and taking into account the specific elements of the curriculum that are involved. A careful revision of the possible ways in which the material can be used will help design effective learning activities and teaching methodologies that will ensure the planned lessons are learned

Based on the interviews carried out with the persons in charge and trainers of the course and the observations made by participants, it can be concluded that the materials should include a significant amount of pictures, photos and, in general, be aesthetically appealing to young people. It has been found that one version of a material with too much text makes students lose their focus, while a different version of the same material with pictures and photos makes

comprehension easier.

This shows materials must be clear, include figures and diagrams. The more pictures, the simpler and more understandable it is.

There are many support materials available for teachers to easily use. Below are some videos and publications to that effect.

It is recommended to visit the European Agency for Safety & Health at Work. In particular, it has strategies on risk prevention for teachers and a variety of cartoon videos suitable to work on important OSH-related concepts in a dynamic way (including guidelines for teachers).

Videos and other support materials, per topic, for example:

Risks at the kitchen of	Available at: https://www.youtube.com/watch?v=gwkpvLaravE
restaurants	Length: 14:00 minutes
Counter stress	Available at: https://www.napofilm.net/en/napos-films/napo-when- stress-strikes/counter-stress Length: 0:49 minutes
Risk prevention - No	Available at: https://www.youtube.com/watch?v=h8leJZsz-Sw
laughing matter	Length: 8:38 minutes
¡Cuídate! prevención de	Available at: https://www.youtube.com/watch?v=fj7e-uE_5NY
riesgos laborales en el	Length: 10:35 minutes
trabajo	
Campaña de Prevención	Available at: https://www.youtube.com/watch?v=VDhydb-1UsQ
de Riesgos Laborales de	Length: 5:49 minutes
LafargeHolcim	
Distraction as a risk factor:	Available at: http://gomez2010.weebly.com/uploads/5/8/0/2/5802271/
Distraction	info_003_sso_la_distraccin.pdf

D	A
Burns and cuts	Available at: https://www.youtube.com/watch?v=95cZxS_ELul
	Length: 5:14 minutes
Florito II.	Available at: https://www.youtube.com/watch?v=xwyeFfjtyx8
Electrical hazard	Length: 1:22 minutes
Electrical hazard	Available at: https://www.youtube.com/watch?v=Jl3TJ8XUA9A
Electrical nazard	Length: 3:25 minutes
Prevention of falls	Available at: https://www.youtube.com/watch?v=HXS_O1G3KXI
Prevention of fatts	Length: 0:31 minutes
¿Qué son los Trastornos	Available at: https://www.youtube.com/watch?v=djadHooEMrE
musculoesqueléticos?	Duración: 1:20 minutos
Prevention of	Available at: https://www.youtube.com/watch?v=djadHooEMrE
musculoskeletal disorders	Length: 1:20 minutes
The importance of	Available at: https://www.youtube.com/watch?v=RKzg01HzHgk
machine maintenance	Length: 3:52 minutes
	Available at: https://www.youtube.com/watch?v=ebd7foIItyw
	Length: 3:12 minutes
Hazardous substances	Available at: http://www.insht.es/InshtWeb/Contenidos/Documentacion/
Tiuzui uous substances	TextosOnline/FichasNotasPracticas/Ficheros/np_enot_78.pdf
	Available at: https://gestoresderesiduos.org/noticias/prevencion-de-ries-
	gos-en-el-manejo-de-sustancias-quimicas
Napo video on hazardous	Available at: https://www.youtube.com/watch?v=5PrAybF5mJg
substances 1	Length: 0:22 minutes
Simulator - management	Available at: https://www.youtube.com/watch?v=3cnxqbniul4
of hazardous substances	Length: 2:47 minutes
Videos about the	Available at: https://www.youtube.com/watch?v=bnCuXY_gEqQ
prevention of work	Length: 2:08 minutes
accidents for young audiences	
audiences	Available at: https://www.napofilm.net/en/using-napo/napo-for-teachers/
Best signs for safety	napos-best-signs-safety/lesson-two-mandatoryrescue-signs#node-33
	hapos best signs sujety/lesson two manadoryrescue signs#node=33

OTHER GOOD EXAMPLES OF EDUCATIONAL AND TRAINING TOOLS ABOUT OSH FOR YOUNG PEOPLE

- The Canadian Centre for Occupational Health and Safety(CCOHS) has prepared teaching tools, the *Health + Safety Teaching Tools* to make it easy for teachers to educate their students about what they need to know to stay healthy and safe when they enter the workforce. The content is geared for middle and secondary school students.
- The National Institute for Occupational Safety and Health (NIOSH) of the United States has designed the **Youth@Work—Talking Safety** curriculum to teach the basics of OSH in a fun and interesting way to young people. The activities described in the curriculum highlight the hazards and prevention strategies of a great variety of work places where young people work. An assessment tools has recently been added to measure the knowledge that students have on safety and health at work, if they pass, they obtain a digital credential.
- The California Partnership for Young Worker Health and Safety, that brings together government agencies and statewide organizations representing educators, employers, parents, job trainers and others, has developed strategies to protect youth at work. Among its projects, it includes **Young Worker Resource Centers in California**, which provides information, training, educational materials, technical assistance and referrals to help educate youth, employers and the community on OSH, and protection to young workers. Its webpage, **Youngworkers.org**, includes information for adolescents, parents, teachers, job educators and employers.

- The Enterpreneurs Association of Navarra (CEN) has published a *guide* to help entrepreneurs to manage and prevent risks in terms of OSH for all young workers in small and medium-sized enterprises. The guide describes the specific requirements applicable to workers under 18 years of age (CEN, 2015). Available at: https://www.cen.es/documentos/ficheros_publicaciones/20170213123711_2653.pdf
- Oklahoma (United States) has been the first state to enact a law for "OSH integration into education" (2015) which establishes that the competent state authorities in work and education must provide training on safety and health in the workplace at schools for students of grades 7-12 (i.e., students from 12 to 18 years of age). The State of Texas has recently enacted a similar law and, other two States, California and Arkansas, are studying laws inspired by the Oklahoma Law.
- The **Guide for young workers** focuses on the rights and responsibilities of young workers at work, with a particular emphasis on OSH (Ombudsman for fair work of Australia, 2017).
- The ILO has developed practical and easy to use tools to assess and manage risks, in:
 - o A 5 step guide for employers, workers and their representatives on conducting workplace risk assessments.
 - o Training package on workplace risk assessment and management for small and medium-sized enterprises.
 - o Self-manage health and safety at work. Self-Training and Competency Assessment Guide. Montevideo: ILO/Cinterfor, 2011.

Example of a mainstreaming strategy in the analysed programme

Example of a mainstreaming strategy in the analysed programme

Here is an example of a mainstreaming strategy proposed for the cooking course that was chosen by INEFOP for the development of the pilot study for the Project.



The course was selected based on successful criteria in terms of results (good performance in general of the training institution) and the demand by the labour market and the young audience. Indeed, although this training institution also offers bakery and confectionery courses, priority was given to the culinary course since it is the most demanded by the market and by young people.

It is worth mentioning that the guidelines for mainstreaming have as a starting point the existing curriculum and aim at complementing and strengthening good practices already carried out by the training institution and its staff.

To interpret and contextualize the proposed strategies it is necessary to understand the

characteristics of the course

It is a course that is aimed at the culinary sector in general and, in particular, at healthy food for those who must follow a certain nutritional regimen due to suffering pathologies such as hypertension, diabetes, cholesterol, obesity, celiac disease, etc.

It is aimed at workers under unemployment insurance (both men and women), who have completed primary education, which may include young people over 18, although it is not an exclusive requirement. The average number of participants is between 13 and 15 per course.

The course lasts four months of classroom training, a total of 134 hours, with a maximum of 16 hours per week. As for educational continuity, the course promotes that young people continue their studies but it is not accredited by formal education training.

Among the objectives of the course, it is set forth to promote among students the "integration of occupational safety and health, the prevention of accidents at work as well as the duties and obligations of workers and information about the market" 4

Occupational health is one of the thematic units of the training offer, as can be observed among the list of subjects:

- Occupational Health
- Cooking
- Bakery
- Computing literacy
- Occupational project
- Entrepreneurship

Although the teaching strategies are not detailed



⁴ Ídem.



in the programme, in general terms, the proposal sets forth that the methodology should consist of theoretical-practical workshops where students work in groups and individually. Students pass along all the areas involved in a hall and a kitchen, participating in the different roles of the occupations and "applying the knowledge acquired on risk prevention at the Occupational Health Workshop".5

The unit or workshop on **Occupational Health** focuses on OSH in a specific way and can be considered as an introduction and awareness raising into OSH. Here, there is a special focus on the concept but, it will be in the cooking and bakery where all the general grounds discussed throughout the unit will be put in practice.

Along this line, the suggested mainstreaming strategy aims at mainstreaming OSH into all

thematic units, although there is a special emphasis on all of those which are more critical because they are related to the key and jobrelated technical skills to be developed. It is the case of **Cooking and Bakery**.

In these two units, the purpose is to incorporate OSH to all learning situations and opportunities, while students work on the identification, ownership and implementation of OSH skills (risk factor identification, implementation of prevention measures, avoidance of common errors, and application of current regulations).

It is actually in these two units where participants learn work techniques and processes and identify the *situation* of OSH skills. This is key since skills development is not only associated to a

It is at the cooking practice where participants learn work techniques and processes and can identify the situation of OSH skills.

Skills development is not only associated to a particular repertoire of knowledge but, mainly to the intelligence of situations, that is, understanding and approaching new situations by participants, by applying and adapting their previous knowledge.

⁵ FISE Proposal, November 2016, cooking.

particular repertoire of knowledge but, mainly to the *intelligence of situations*, this means that participants understand and approach new situations, by applying and adapting their previous knowledge.

In general terms, the two workshops suggest:

- Before starting each of the work processes, present/activate previous information on risk factors, preventive measures and current regulations. Warn about common errors.
- During each work process, observe participants' performances and provide feedback individually and collectively, carry out specific activities aimed at raising awareness and holding participants accountable for OSH skills.
- At the end of each process, encourage reflection on the measures implemented and any possible OSH oversights and/or errors. Encourage self-assessment in the field (what went right to prevent risks and avoid accidents, what could be improved, individually and collectively).





Regarding **computing literacy**, it is interesting and appealing for young people to develop basic skills through the use of ICT, related to the culinary universe, to the prevention of risks and, in general, to all the topics related to OSH in the profession: looking for information about risks and /or accident rates, preparing written, graphic or audio-visual materials to disseminate and communicate information, etc. This is an activity not specifically focused on OSH skills development but on the generation of activities and materials related to OSH contents that may be interesting and appealing to young people.

In the **Entrepreneurship** unit, it is also vital to address the importance of having the necessary skills to improve the health and safety at work, as a key aspect that has an impact on the enterprise's sustainability. Identifying the importance and the benefits of good OSH management enhances human management, reduces costs, diminishes

absenteeism, contributes to client satisfaction and improves management/ conservation and purchases, among other things.

Through the **Occupational Project** unit, it is important to introduce the aspect of care and associated behaviours, the concern and responsibility for safety and health in themselves and the others, at work and at family life, in a comprehensive way while drafting the occupational project, both through individual and group discussions or through hands-on experience that prompt the group to talk about these topics. Another key aspect, related to the search and election of a job place, has to do with decent working conditions. It is crucial to open up spaces for reflection, to develop critical thinking and to handle information to choose where to work, while looking for options where quality, hygiene and safety standards are met.

Skills to be developed and training activities

Identifying risk factors in the different work processes and spaces, and their consequences for OSH.	Identifying the risks to safety and health for each work process. Identifying the possible consequences of an accident according to the risk. Identifying the worker's rights and duties in the field of OSH.	Cooking Bakery Occupational Health Entrepreneurship Occupational project
Taking preventive measures to avoid risks to OSH.	Using the tools, equipment, clothing and machines in safe conditions. Wearing required protective equipment. Carrying out the activities complying with established safety and health regulations and procedures. Keeping the conditions of hygiene and safety in the workspace. Warning/correcting own actions or someone else's actions to prevent an accident.	Cooking Bakery Occupational Health
Promoting safe and healthy work among team members.	Being aware of the risks and unsafe/unhealthy practices exposure of team members. Promoting OSH among team members. Making suggestions for improvement to their manager or the organization where they work.	Cooking Bakery Occupational Health Entrepreneurship Occupational project
Timely intervening in risk or accident situations to themselves and others at work.	Having information to act in case of an accident (locate first aid kit; perform first aid and steps to take before the competent authorities). Acting in a timely and appropriate manner in case of an accident.	Cooking Bakery Occupational Health

Along the same line, for each training activity, different learning activities can be suggested that can be applied by trainers to promote the development of these skills. By way of example and without intending to provide an exhaustive list, here are some activities that may be proposed, adapted and recreated by trainers.

Occupational Health workshop Skills to be developed: Identifying risk factors Taking preventive measures Promoting safe and healthy work Timely intervening in situations of risk or accident	 Oral presentations with debate. Group work and plenary sessions based on teaching materials (factfiles/photos / videos). Problem situations / case studies. Games (for example: "Scruples"-like games, "what would you do if?"). Videos (use or creation by learners) and discussion. Collective project on OSH led by SO and with participation of all the other workshops. (For example, OSH exhibition or campaign to improve the workplace).
Cooking and bakery workshops Skills to be developed: Identifying risk factors Taking preventive measures Promoting safe and healthy work Timely intervening in situations of risk or accident	 Oral presentations with debate led by the teacher or the participants themselves about risks/measures of prevention/standards. Group production and posters on OSH in the kitchen. Inductive approach to identify risks and measures in every stage of the work. Creation/use of factfiles. Self-assessments and / or peer evaluations with checklists to verify safe and healthy performance and safety conditions. Analysis by participants of OSH in different learning situations in the kitchen. Role-play. Testimonials and analysis in groups. Learning outings: kitchens of restaurants, etc. (with observation guidelines). Debates.
Computing literacy Skills to be developed: Taking preventive measures Promoting safe and healthy work	 Internet search of materials and videos that may illustrate OSH concepts. Participation in related forums. Promoting the ability to plan at the workplace, the necessary materials and the corresponding safety measures through the development of a plan by using computer-based support.
Entrepreneurship Skills to be developed: Identifying risk factors Promoting safe and healthy work	 Group work to identify the impact of accidents/practices at odds with OSH at the enterprise. Case studies. Exercises (multiple choice, matching, etc.) about the impact of accidents or unsafe/unhealthy practices at the enterprise. Presentations (training capsules) prepared by students.
Occupational project Skills to be developed: Identifying risk factors Promoting safe and healthy work	 Hand-on dynamics (care). Videos or visits and debates on the safety and health at different facilities. Role play: job interview (aspects related to OSH and quality).

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