

# SAFE AND HEALTHY FOOD IN TRADITIONAL FOOD MARKETS

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IN THE WHO  
EUROPEAN REGION



REGIONAL OFFICE FOR

World Health  
Organization  
Europe

# ABSTRACT

This technical report contains guidance on the promotion of safe and healthy food in traditional markets within the WHO European Region, targeting all stakeholders from policy-makers to market workers. This document outlines the main guiding principles of a safe and healthy traditional food market and proposes a stepwise approach to the implementation of safe and healthy traditional food market initiatives.

## KEYWORDS

Noncommunicable diseases

Food markets

Food safety

Sustainable and healthy diets

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# CONTENTS

Acknowledgements	iv
List of contributors	v
Executive summary	vi
<hr/>	
<b>1. Background</b>	<b>1</b>
<b>2. Objectives of the guidance document and target audience</b>	<b>4</b>
<b>3. Guiding principles for promoting safe and healthy food in traditional markets</b>	<b>5</b>
3.1 Food systems approach	5
3.2 Risk-based approach	6
3.3 Safe, healthy and sustainable food for all	7
3.4 One Health approach	8
3.5 Stepwise approach	8
<b>4. Components of a safe and healthy traditional food market</b>	<b>9</b>
4.1 Basic infrastructure	10
4.2 Appropriate legal basis	10
4.3 Risk-based inspection and enforcement services	11
4.4 Basic food hygiene and training of market vendors	11
4.5 Safe and healthy food	13
4.6 Health promotion and communication	13
4.7 Procedures for emergency response	16
<b>5. Stepwise approach to implementation of healthy traditional food market initiatives</b>	<b>17</b>
5.1 Assess the current setup of the market and the extent to which it provides safe and healthy food	17
5.2 Identify key nutrition and food safety issues and understand their origin	18
5.3 Decide on the intended future shape and characteristics of the market	19
5.4 Identify possible interventions to overcome the issues identified	20
5.5 Devise action plan, priorities, timeframe and budget	20
5.6 Implement, monitor and evaluate healthy traditional food market initiatives	21
<b>6. Issues of particular importance to markets in the context of COVID-19</b>	<b>22</b>
<hr/>	
References	24
Annex 1. Safe and healthy food in traditional food markets in the WHO European Region	26



# LIST OF CONTRIBUTORS

The following contributors were responsible for writing this guide.

## **Gabriela Albuquerque**

Public Health PhD student, Department of Public Health and Forensic Sciences and Medical Education, Faculty of Medicine, University of Porto, Porto, Portugal; Researcher, EPIUnit – Epidemiology Research Unit, Institute of Public Health, University of Porto (ISPUP), Porto, Portugal

## **Sofia Sousa**

Food consumption and nutrition sciences PhD student, Faculty of Nutrition and Food Sciences, University of Porto, Porto, Portugal; Researcher, EPIUnit – Epidemiology Research Unit, Institute of Public Health, University of Porto (ISPUP), Porto, Portugal

## **Peter Sousa Hoejskov**

Technical Officer for Food Safety and Zoonotic Diseases, WHO Regional Office for Europe, Copenhagen, Denmark

## **Pedro Moreira**

Full Professor, Faculty of Nutrition and Food Sciences, University of Porto, Porto, Portugal; Researcher, EPIUnit – Epidemiology Research Unit, Institute of Public Health, University of Porto (ISPUP), Porto, Portugal; Research Centre in Physical Activity, Health and Leisure, Faculty of Sport, University of Porto, Porto, Portugal

## **Nuno Lunet**

Assistant Professor, Department of Public Health and Forensic Sciences and Medical Education, Faculty of Medicine, University of Porto, Porto, Portugal; Researcher, EPIUnit – Epidemiology Research Unit, Institute of Public Health, University of Porto (ISPUP), Porto, Portugal

## **Patrícia Padrão**

Assistant Professor, Faculty of Nutrition and Food Sciences – University of Porto (FCNAUP), Porto, Portugal; Researcher, EPIUnit – Epidemiology Research Unit, Institute of Public Health, University of Porto (ISPUP), Porto, Portugal

Further contributions to the present work were made by the following.

## **Holly Rippin**

Consultant at the WHO European Office for the Prevention and Control of Noncommunicable Diseases

## **Afton Halloran**

Consultant at the WHO European Office for the Prevention and Control of Noncommunicable Diseases

## **Kathrin Hetz**

Intern at the WHO European Office for the Prevention and Control of Noncommunicable Diseases

## **Kremlin Wickramasinghe**

Technical Officer at the WHO European Office for the Prevention and Control of Noncommunicable Diseases

## **João Breda**

Head of the WHO European Office for the Prevention and Control of Noncommunicable Diseases and a.i. Programme Manager, Nutrition, Physical Activity and Obesity, Division of Noncommunicable Diseases and Promoting Health through the Life-course

# EXECUTIVE SUMMARY

Traditional food markets are important sources of food for millions of people in the WHO European Region. They can play a central role in ensuring access to safe, nutritious and culturally appropriate food, promoting health and preventing disease. However, limited availability and access to safe and healthy foods in many markets often hinder the adoption of nutritionally adequate diets. Traditional food markets have also been associated with foodborne and zoonotic outbreaks, including most recently COVID-19. With this multi-layered challenge in mind, this document aims to provide guidance on the development of markets offering safe and healthy food, taking into account the diversity of settings across the WHO European Region.

A safe and healthy traditional food market should provide a given population with food that is safe and nutritionally adequate. To achieve this, several aspects have to be taken into consideration: physical layout and facilities; hygiene practices; availability and accessibility of nutritious and sustainable foods; culture; preparation/cooking practices of ready-to-eat food; and awareness and knowledge on the part of consumers and vendors, among others. To this end, the implementation of a combination of diverse interventions, encompassing research, regulation and education and operating at different stages of the food chain, has the potential to yield the best results.

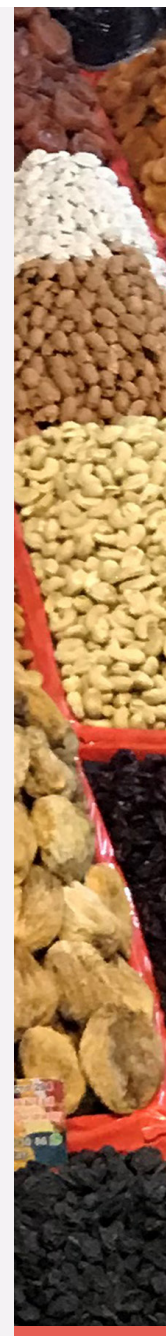
Success in establishing and maintaining a safe and healthy traditional food market is highly dependent on the current state of the market in terms of location, facilities and equipment; nutrition and food safety awareness among workers and customers in the market; and the ability of governments and market authorities to make the best use of existing resources. Taking account of the great variety of markets across the WHO European Region, the purpose of this guidance document is to outline the basis of a stepwise approach to implementing a safe and healthy traditional food market initiative, which must be adjusted to the particular characteristics of each context. This process comprises identifying needs and priorities for action, defining interventions to be implemented, developing an action plan, and implementing, monitoring and evaluating the plan.

The current conjuncture of unprecedented challenges for local and global food security and safety must be seen as an opportunity to take multisectoral action to build healthier and more sustainable food environments which provide safe and nutritious food for all. This will ultimately lead to better health for all.



## Key messages

- The WHO European Region faces a series of challenges affecting the management of food safety and nutrition risks in traditional food markets. The COVID-19 pandemic has introduced new challenges, particularly at the local level, requiring an additional focus on food security, food safety and personal behaviour.
- Traditional food markets play a central role in communities across the WHO European Region. To promote safe and healthy food in traditional markets, it is necessary to adopt a stepwise approach which is rooted in the guiding principles of food systems, One Health and risk-based approaches, as well as in several other factors that shape safe and healthy diets.
- The main components of a healthy traditional food market include the basic infrastructure, an appropriate legal basis, risk-based inspection and enforcement services, basic food hygiene and training of market vendors, safe and healthy food, health promotion and communication, and effective emergency response procedures.
- To improve the availability, accessibility, utilization and stability of safe and healthy food, it is necessary to identify key nutrition and food safety issues and their origin; to decide on the intended future characteristics of the market; to identify possible interventions; and to prepare action plans, priorities and budget, which should be adapted to local characteristics. Further monitoring and evaluation are essential to promote a sustainable approach.
- In order to prevent the spread of COVID-19 and other infectious diseases in traditional food markets, both workers and the general public need to be aware of the recommended personal hygiene and respiratory practices – physical distancing, frequent cleaning and disinfection of work surfaces, and avoiding contact with live animals and potentially contaminated surfaces.









# 1. Background

Access to nutritionally adequate and safe food was recognized as a right of each individual by the World Declaration on Nutrition, jointly made by the Food and Agriculture Organization of the United Nations and WHO in 1992.<sup>1</sup> Although there have been considerable improvements, one third of the world's population, including in the WHO European Region, is currently experiencing malnutrition. While most high-income countries essentially face a high prevalence of overweight/obesity and diet-related noncommunicable diseases and mortality due to them, many low- and middle-income countries face a double burden of malnutrition, including additionally some forms of undernutrition. The most vulnerable groups are particularly affected.<sup>2</sup>

Foodborne diseases are a significant public health concern in the WHO European Region. In 2010, an estimated 23 million people fell ill, and approximately 4700 people died, from consuming contaminated food.<sup>3,4</sup> Unsafe food is not only a threat to human health but also plays a fundamental role in the socioeconomic development of countries, affecting people's ability to purchase safe and healthy food.

The United Nations Sustainable Development Goal No. 2 is an international commitment to reduce inequality within and among countries and to eradicate hunger and malnutrition.<sup>5</sup> A set of international recommendations for safe and healthy diets followed,<sup>6,7</sup> and currently much of the emphasis is on prioritizing local food environments to better acknowledge and address food safety and nutrition inequities.<sup>8</sup>

Over recent decades, food systems have become more industrialized, with considerable advances in production, distribution and processing technologies, and they face unprecedented challenges as a consequence of urban expansion, although at different rates in high-income countries and low- and middle-income countries. Currently, approximately 74% of the European population lives in urban areas; the percentage is lower, but growing, in the countries of eastern Europe (70%) and central Asia (48%).<sup>9</sup> In many countries, traditional food markets\* play a central role in communities, as major food suppliers and as sociocultural spaces. In some regions, such markets form the basis for food security and people's livelihood, while in others they play a smaller role and mostly offer exclusive niche products. Furthermore, traditional food markets may comprise different organizational dynamics: while some are permanent with fixed designated locations (for example, bazaars), others are temporary and can be set up on an ad-hoc basis (for example, informal markets and some farmers' markets).

Food prices are an important determinant of food acquisition, ultimately influencing food consumption.<sup>10</sup> Thus, ensuring that nutrient-dense and safe foods are available, accessible and also affordable in traditional food markets has the potential to positively influence people's dietary preferences and choices, and thus to help improve their nutritional status and health. Furthermore, foods must be culturally

\* The term "traditional food market" is used throughout this document to include wet markets, bazaars, informal markets and farmers' markets, where foods of animal and non-animal origin and dried goods are sold and live animals are sometimes housed and slaughtered on site.



**DRIED FRUITS AND NUTS ON DISPLAY IN A TRADITIONAL FOOD MARKET IN KAZAKHSTAN**

appropriate and produced with low environmental impact.<sup>11</sup> In traditional food markets, the food offer is likely to vary but usually encompasses a wide range of products, including fruits, vegetables, grains, tubers, meat, poultry, fish, eggs, dairy products and beverages. Many of these markets also make available a range of ready-to-eat foods, either industrially processed or manufactured by smallholders.<sup>12</sup> For example, the WHO FEEDcities project assessed markets in eastern Europe and central Asia, with the aim of characterizing urban food environments in this area of the WHO European Region. It found a wide availability of energy-dense foods high in sodium, sugar, and saturated and *trans* fats, possibly contributing to the growing burden of noncommunicable diseases.<sup>13–19</sup>

In some parts of central Asia, live animals are also traded for food, which makes markets more vulnerable to the spread of emerging foodborne and zoonotic diseases. Most recently, a large number of the early COVID-19 pandemic cases were associated with a traditional food market in China, where live animals were caged, slaughtered and sold to the public. Besides the direct risk of spreading disease, the COVID-19 pandemic has also worsened an ongoing food security and nutrition crisis, exposing the risks, vulnerabilities and inequities in global food systems. Policy measures taken to slow the spread of the virus (such as lockdowns and physical distancing) have had a major impact on food safety, food security, diet quality and sustainability, and have increased demand for e-commerce services.<sup>20</sup> Closures and restrictions on informal and open-air markets have also contributed to increased vulnerabilities in short supply chains.<sup>21</sup> In the face of this threat, more equitable, resilient and sustainable food\* systems are needed,<sup>2,22</sup> along with health promotion strategies to raise awareness of food safety and nutrition among consumers, producers and vendors.

In 2006, WHO developed a *Guide to healthy food markets*.<sup>12</sup> The guide provides basic orientation and a reference point for developing safe and healthy traditional

\* Sustainable foods are foods that are produced in a manner that takes full account of the needs of present and future generations, as well as profitability, environmental health, and social and economic equity.



food market pilot projects. It advocates for healthy traditional food markets as valuable settings that can effectively improve food safety, nutritional status and environmental health. The guide contributed to good progress in developing healthy traditional food markets around the world, including in the WHO European Region. A decade and a half later, the globalization of the food chain, increasing international trade, urbanization, new technologies, climate change, increased consumer awareness and concern about health have changed the conditions under which food is produced and consumed, and how food safety and nutrition risks are managed in the Region. The COVID-19 pandemic has added an additional layer of complexity to the way food safety and zoonotic disease risks are managed. For these reasons, existing guidance on healthy traditional food markets needs to be updated in order to prevent and control potential future zoonotic and foodborne disease outbreaks, to prevent the spread of infectious diseases such as COVID-19 in traditional markets, and to improve the nutritional composition of food and tailor it to current food safety and nutrition challenges in the WHO European Region.

This guidance aims to bring together the basic principles of safe and healthy food in traditional food markets, emphasizing the need for an interconnected perspective on the urban-rural food systems in the WHO European Region.<sup>23</sup> It emphasizes the role that traditional food markets can play in contributing to environments that promote health and food safety, advocating for safe, healthy, sustainable, accessible and affordable food for the population, with a particular focus on the most vulnerable groups (among consumers, vendors and other market workers). Based on a One Health approach to promoting safe and healthy food in traditional food markets, it recognizes the interconnectivity of sectors and stakeholders along the food supply chain. The guidance also outlines a stepwise implementation of these principles in markets across the Region, while taking into account the unique characteristics of each urban-rural environment.

**PULSES BEING SOLD IN  
A TRADITIONAL FOOD  
MARKET IN TAJIKISTAN**



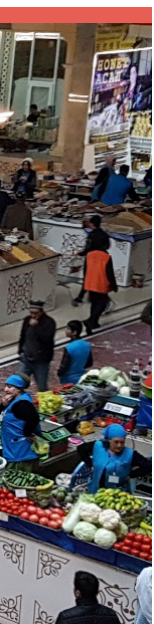


## 2. Objectives of the guidance document and target audience

The purpose of this document is to give guidance on the development of traditional markets that offer safe and healthy food, taking into account the diversity of settings across the WHO European Region. The specific objectives of the document are:

- to offer advice on taking a One Health and stepwise approach to the management of food safety and nutritional risks associated with traditional food markets;
- to promote the preparation, handling, sale and consumption of safe and healthy foods and beverages in traditional food markets;
- to guide governments and market authorities in implementing measures that help traditional food markets become environments that promote health and food safety;
- to support governments and local authorities in strengthening public health interventions to reduce the risk of transmission of COVID-19 and other infectious diseases in traditional food markets.

The target audience comprises all stakeholders involved in traditional food markets, including local policy-makers and market management authorities, health and food safety experts and academics, local community leaders, market vendors and workers. The document will also be useful to national authorities as a food policy instrument that aims to assess, monitor and overcome critical nutrition and food safety issues. This will help reduce inequalities and inequities in food environments and contribute to a transformation of food systems that builds resilience and sustainability at several levels.



# 3. Guiding principles for promoting safe and healthy food in traditional markets

The intention of the guiding principles set out below is to simplify and standardize the implementation across the WHO European Region of the initiative to promote safe and healthy food in traditional markets, while preserving the unique characteristics of each market. Although each of these principles is described in a separate section, it should be recognized that they are in fact intertwined and should be used together to promote healthy and safe food in traditional markets. In each market, the main risks, and the opportunities to reduce risk, should be assessed at every step of the food chain, relying on the collaboration of all stakeholders.

## 3.1 Food systems approach

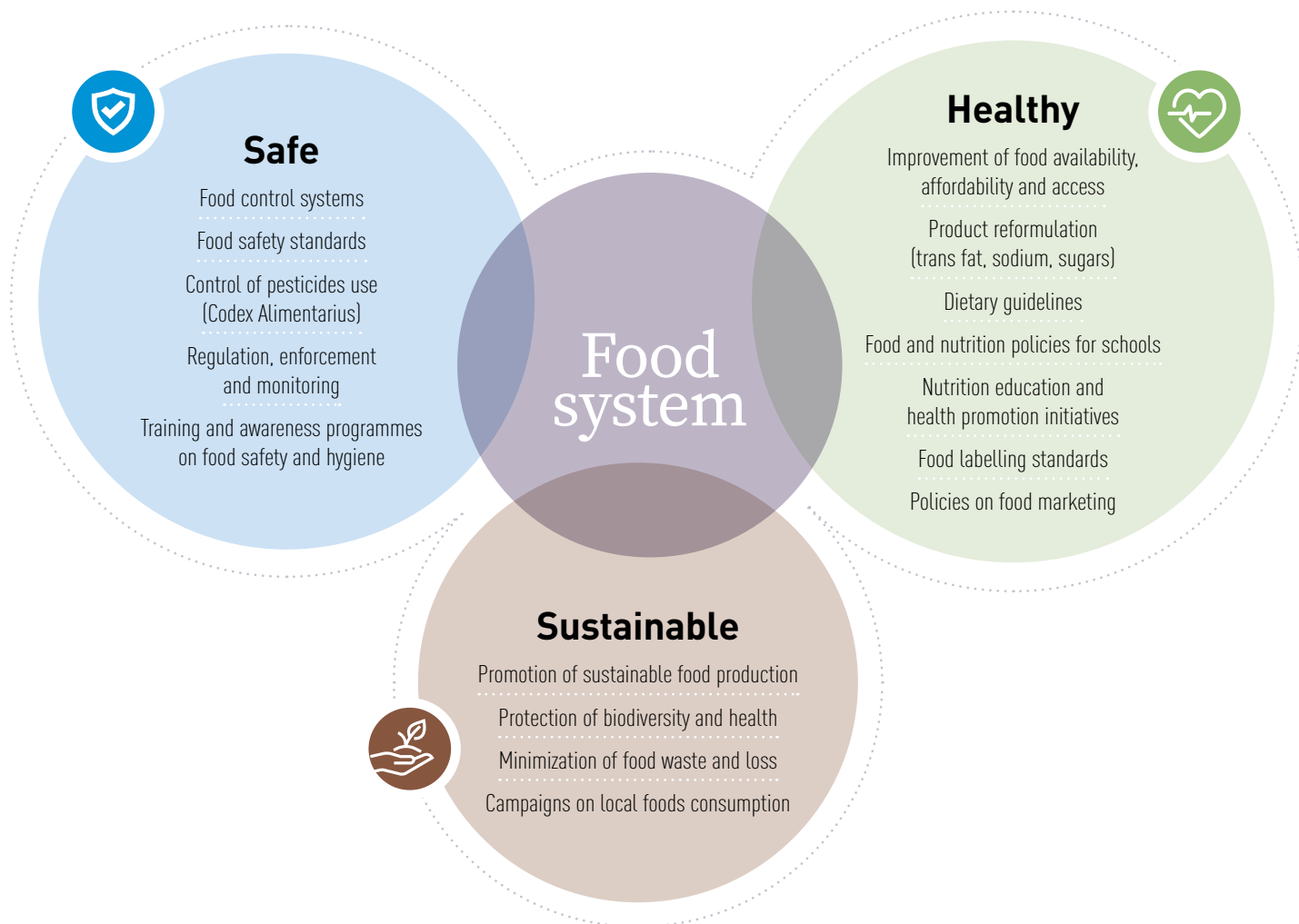
Food systems encompass the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products. These goods are derived from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded. A food system must also be considered in the context of rapid population growth, urbanization, changing consumption patterns and globalization, as well as climate change and the depletion of natural resources.

A TRADITIONAL  
FOOD MARKET  
IN TAJIKISTAN



**Fig. 1.**  
A simplified and schematic view of a food system, from farm to table

A food systems approach to healthy diets in traditional food markets focuses on using entry points within the food system to influence the consumption of healthy diets by populations with the aim of attaining optimal nutritional status. For food safety, a food systems approach recognizes that food contamination can take place anywhere along the food chain continuum and that food safety risks must be managed at every step of the food chain from farm to table (Fig. 1).



**FARM** > **PRODUCTION** > **PROCESSING** > **STORAGE** > **DISTRIBUTION** > **RETAIL** > **LABELLING** > **MARKETING** > **CONSUMPTION** > **TABLE**

### 3.2 Risk-based approach

Applying a risk-based approach to promote healthy and safe food in traditional food markets implies the existence of an underlying science or evidence base where risk factors for unhealthy diets and food contamination are identified. A risk-based approach encompasses the use of tools to assess risks and create systems that optimize the ability of governments or market authorities to prevent and control foodborne and zoonotic diseases and improve public health.

Improving nutrition and food safety in traditional food markets requires the best possible use of resources. This means focusing government efforts on the greatest risks and opportunities to reduce risk, wherever they may arise. This includes the adoption of a combination of interventions and approaches that will yield the greatest health improvements.



### 3.3 Safe, healthy and sustainable food for all

A safe and sustainable healthy diet should promote physical, mental and social health and well-being, while being available, affordable for all and respecting local culture at all times. A safe and healthy diet advocates frequent intake of unprocessed or minimally processed foods, with restriction of highly processed foods and beverages; abundance and variety of fruits and vegetables, as well as wholegrains, legumes and nuts; inclusion of eggs, dairy, poultry and fish in moderate amounts, as well as small quantities of red meat; and safe, clean water as the beverage of choice. Foods should provide adequate energy (energy intake balanced with energy expenditure) and nutrients across the lifecycle, with less than 30% of total energy intake from total fat, less than 10% from saturated fats, less than 1% from *trans* fats (as low as possible), less than 10% from free sugars (less than 5% if possible), and no more than 5 g of salt intake per day. Risks arising from biological or chemical contaminants (pathogens, chemicals, toxins, veterinary drugs, plastics and derivatives) should be reduced and managed, food loss and waste should be minimized, and sociocultural aspects, accessibility and desirability should be respected.<sup>11</sup>

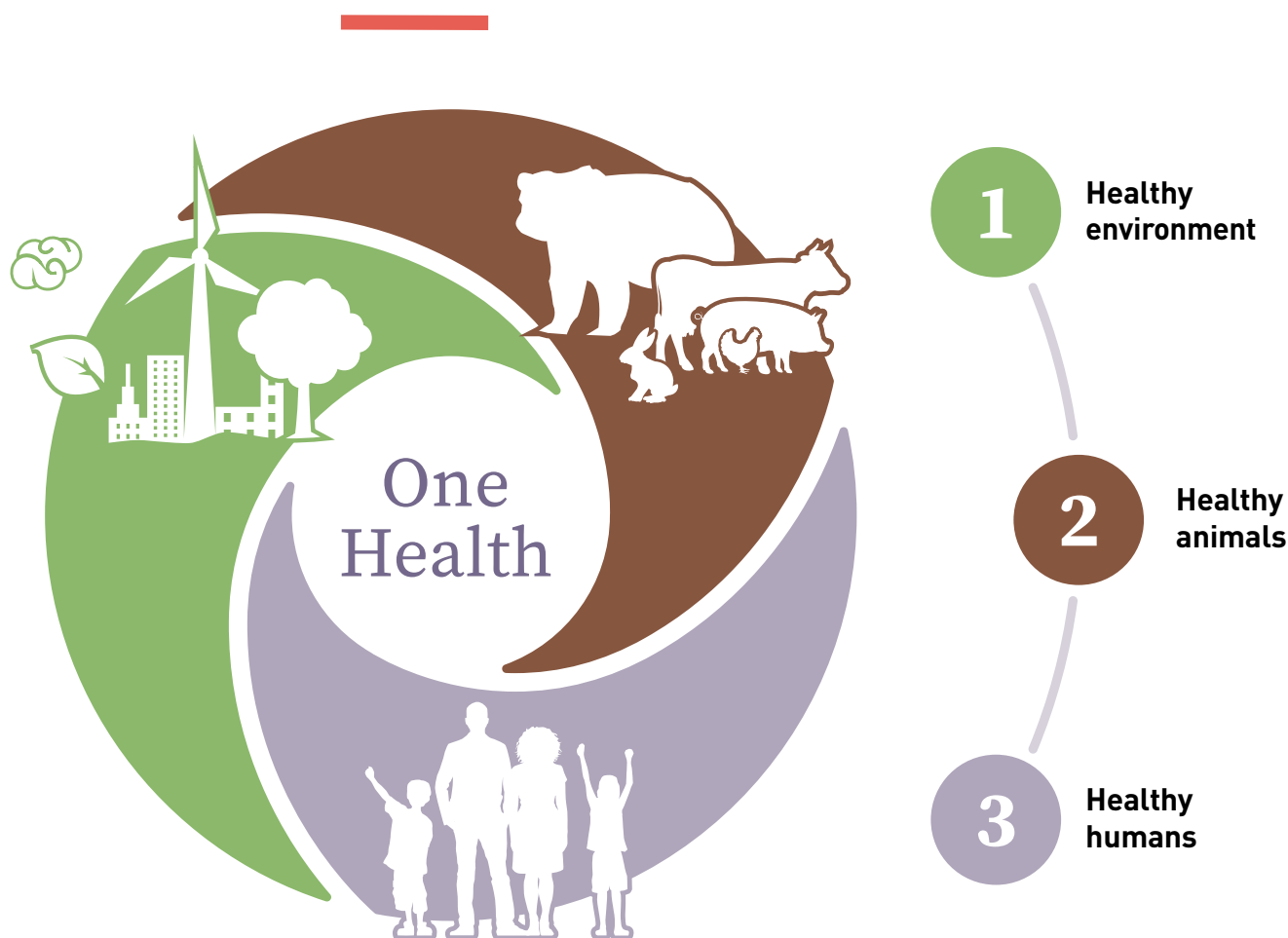
Some discrepancies with these principles have been identified when current dietary patterns in different regions of the world, including Europe and central Asia, are compared. Policies should take into account these discrepancies, which include overconsumption of some food groups, especially red meat and starchy vegetables, together with insufficient consumption of vegetables, fruit, legumes, wholegrains, nuts and fish.<sup>6</sup> The greater demand for nutrient-rich foods in international and domestic traditional food markets is an opportunity to generate economic growth and profitable employment.<sup>24</sup> Encouraging the availability of organic foods is one example of how this could be done.<sup>25</sup>

A safe and sustainable healthy diet should be rooted in sustainable practices of food production, handling, sale and consumption, through optimization of natural resources and protection of ecosystems. This requires dietary diversification and frequent consumption of local and traditional products (vegetables, fruits, small stock) while respecting seasonality.<sup>8</sup> It should also take into account the local ethnic cultural heritage and social identity – protecting food workers, using food as a means to connect and achieve fruitful relationships across the generations, and recovering ancient and renewed foods and flavours, and dietary and culinary traditions.<sup>26</sup> Diversity is one of the main characteristics of food culture in the WHO European Region, at national and local level. While some societal changes are leading to a shift towards a more globalized and industrialized food system, many social movements, such as the Slow Food movement and initiatives based on local food, are also emerging.<sup>27,28,29</sup> Meanwhile, food tourism is becoming an upward trend globally and across countries in the WHO European Region. This trend could be seen as an opportunity to expand the function, visibility and economic profitability of traditional food markets. Tourists seek to explore and taste traditional foods and beverages steeped in local culture and traditions. This is leading to greater popularity of activities that are primarily based in traditional food markets, such as participating in food festivals, visiting local markets and tasting ready-to-eat (street) food.<sup>30</sup> A safe and healthy market should incorporate the specificities of the local food culture, embracing its diversity and evolving dynamics.

### 3.4 One Health approach

One Health is an approach to designing and implementing programmes, policies, legislation and research in which multiple sectors communicate and work together to achieve better public health outcomes. One Health recognizes that no person, organization or sector alone can address issues at the animal–human–environment interface (Fig. 2). For public health interventions to successfully tackle food safety and zoonotic disease issues, they require communication, collaboration and coordination among food safety and human, animal and environmental health partners.

**Fig. 2.**  
The interface between animals, humans and environment in the One Health approach



### 3.5 Stepwise approach

Advancing and facilitating the availability, accessibility, stability and utilization of safe and healthy food in traditional food markets must take place in a stepwise manner. The WHO European Region is very diverse in terms of economic development, culture, traditions and values, and this is reflected in food production, supply and consumption. The process of advancing traditional food markets to become conducive to safe and healthy food must be tailored to specific country needs and priorities. The correct timing for the introduction of interventions must consider political momentum, resource availability, private sector engagement and public support.

# 4. Components of a safe and healthy traditional food market

The various components that need to be in place if a traditional food market is to be safe and healthy are summarized in Table 1 and then described in detail in the subsequent sections.

**Table 1.**  
Summary of the essential components of a safe and healthy traditional food market

Section	Components	Capacities
4.1	Basic infrastructure	<ul style="list-style-type: none"> <li>• Adequate safe water</li> <li>• Toilets and handwashing facilities</li> <li>• Waste management</li> <li>• Rest areas</li> <li>• Changing rooms</li> <li>• Adequate light and ventilation</li> <li>• Maintenance and cleaning programmes</li> <li>• Facilities to separate live animals and slaughtering from areas where ready-to-eat food is sold to the public</li> </ul>
4.2	Appropriate legal basis	<ul style="list-style-type: none"> <li>• Comprehensive contemporary food laws and regulations covering food safety and nutrition issues</li> </ul>
4.3	Risk-based inspection and enforcement services	<ul style="list-style-type: none"> <li>• Risk-based food inspection plan</li> <li>• Adequate human and financial resources</li> <li>• Registries of food businesses</li> <li>• Models for risk categorization of food products and businesses</li> <li>• Inspection record systems</li> <li>• Risk-based inspection guidelines and checklists</li> </ul>
4.4	Basic food hygiene and training of market vendors	<ul style="list-style-type: none"> <li>• Adherence to good food hygiene practices</li> <li>• Training strategies</li> <li>• Practical hands-on training</li> <li>• Health promotion activities</li> </ul>
4.5	Safe and healthy food	<ul style="list-style-type: none"> <li>• Improvement of availability and access to safe and healthy food</li> <li>• Promotion of local production and short supply chains</li> <li>• Guidelines for safe and healthy food preparation</li> </ul>
4.6	Health promotion and communication	<ul style="list-style-type: none"> <li>• Health communication strategies</li> <li>• Nutrition and food safety promotion</li> <li>• Correctly labelled food, in accordance with Codex standards and guidelines</li> </ul>
4.7	Procedures for emergency response	<ul style="list-style-type: none"> <li>• Clear description of roles and responsibilities for emergency response</li> <li>• Traceability and recall procedures</li> <li>• Procedures for communication between government agencies, market authorities, market vendors and consumers</li> </ul>



## 4.1 Basic infrastructure

The physical layout, facilities and organization of traditional food markets provide the basis for promoting safe and healthy food, improving occupational health, and reducing the risk of transmission of foodborne and zoonotic diseases. Basic infrastructure includes an adequate water supply (safety, quantity and pressure) for cleaning and food preparation, appropriately designed drainage, and a sufficient number of appropriately placed toilets with designated hand-washing facilities. Basic infrastructure also encompasses facilities for appropriate solid and liquid waste management, amenities such as rest areas, changing rooms and designated eating areas, and adequate light and ventilation. Maintenance and cleaning programmes, fire control, and use of proper building materials are other important components of basic market infrastructure.

It is important that markets are organized and structured in such a way that, if live animals are kept and slaughtered in the market, they are kept away from areas to which the public has access. Typical high-risk areas for transmission of pathogens in traditional food markets are locations where live animals are kept or caged and slaughtered. The slaughtering process, during which people may be exposed to body fluids, faeces and other animal waste, is of particularly high risk for transmission of zoonotic diseases and poor occupational health.

Measures to reduce the risk of transmission of zoonotic diseases include phasing out live animal marketing and slaughter in proximity to the public and physically separating such activities from other parts of the market. Slaughter and dressing should be carried out in separate facilities under the control of the official veterinary service for ante- and post-mortem inspections and with good hygiene and sanitation standards for workers and animals.

## 4.2 Appropriate legal basis

Evidence-based food policy and legal frameworks underpinned by effective food control management and consistent compliance and enforcement are pivotal in promoting safe and healthy food in traditional food markets. Food laws and regulations are essential to create an enabling and predictable environment for food production, preparation and sale. The legal basis for safe and healthy food in traditional food markets must determine the legal obligations for managing food safety and nutrition risks, define the roles and responsibilities of the stakeholders involved, adopt risk-based approaches, and allow for legal updates and amendments as circumstances change and new food and nutrition issues emerge.

Food legislation must be based on international standards and recommendations such as *Codex Alimentarius*, apply to all steps of the food chain, and be based on the best available scientific evidence and risk assessments. Such legislation should include strict biosecurity measures to prevent the introduction or spread of infectious and zoonotic diseases. Veterinary public health authorities should provide appropriate monitoring and control of any live animals and animal slaughtering in the market.

Food regulations must be developed through a comprehensive and consultative process, involving all concerned stakeholders, and should be managed and communicated appropriately. It is important that market vendors and consumers

are aware of the legal requirements pertaining to safe and healthy food in traditional food markets and have the necessary capacity and means to implement them.

The legal basis for safe and healthy food in traditional food markets should also include regulations that address issues related to nutrition and diet-related noncommunicable diseases. These may include regulations to control advertising and marketing of foods/beverages high in fat, sugar and/or salt to children, restrictions or thresholds for sodium in ready-to-eat food, elimination of the use of industrially produced *trans* fats, and measures for food labelling, including health and nutrition claims.

Developing and updating food laws, regulations and standards is typically the responsibility of national or subnational governments. However, there are also opportunities for local authorities and market managers to develop and implement standards that apply to specific markets or parts of markets.

### **4.3 Risk-based inspection and enforcement services**

Risk-based food inspection protects consumers by ensuring that food in the market is handled, stored, manufactured, transported, prepared and sold in accordance with applicable legal requirements for food safety and nutrition.

Food business operators have the primary responsibility to ensure food safety and comply with the regulations applicable to the market. The role of the government and market authorities is to enact food laws and regulations and to verify compliance through enforcement actions. Food inspection is central to the enforcement process and a vital component of a national food safety system.

Risk-based food inspection aims to prevent food safety incidents and instances of non-compliance by identifying risk factors and assessing the effectiveness of the control measures in place. Effective risk-based food inspection follows a clear risk-based food inspection plan, is well coordinated across food inspection agencies, and has adequate human and financial resources. Other aspects of risk-based food inspection include registries of food businesses, models for risk categorization of food products and businesses, inspection record systems, risk-based inspection guidelines and checklists, and mechanisms for review and learning for continuous improvements.

It is important that food and veterinary inspectors are qualified and well trained for the job and free from any conflict of interests. They must undertake their duties competently and independently in order to perform food controls in a consistent manner. Specific training programmes should be developed for food and veterinary inspectors who are responsible for enforcing regulations in traditional food markets. Annual training plans should be developed, and training records for each inspector should be maintained and kept up to date.

### **4.4 Basic food hygiene and training of market vendors**

Proper handling of food along the entire food supply chain can help to reduce food safety and quality risks. Many risks to food safety and quality and transmission of infectious diseases in traditional food markets cannot be addressed solely by

regulations and enforcement. Behaviour change among stakeholders along the entire food chain and adherence to good food hygiene practices are required.

Training strategies and materials that are developed for training purposes should be appropriate to existing levels of knowledge and awareness and grasp available opportunities to bring about behaviour change. Formal training sessions for market vendors should be tailored to their specific needs and be designed to minimally disrupt busy working schedules.

The WHO Five Keys to Safer Food provide the basic principles of food safety and good food hygiene and explain the basic principles that all individuals should know if they are to prevent foodborne and zoonotic diseases.<sup>31</sup> The Five Keys are:

- (1) keep clean
- (2) separate raw and cooked food
- (3) cook thoroughly
- (4) keep food at safe temperatures
- (5) use safe water and raw materials.



Personal hygiene and good food handling practices can be coupled with healthy lifestyle interventions such as the promotion of healthy diets and physical activity.



## 4.5 Safe and healthy food

Traditional food markets serve as an important venue for promoting healthy and sustainable diets. The foods available in these settings should be local and produced in a way that respects principles of seasonality, territorial variety, short supply chains and fair trade.

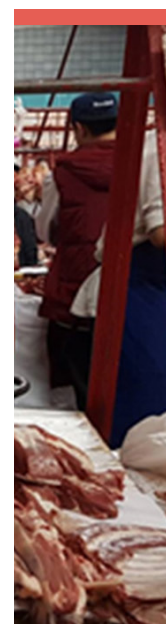
Policies towards safe and healthy food in markets should target a range of issues, including food production and handling procedures, availability, accessibility and labelling. The offer of safer and healthier foods should be improved in order to nudge consumers to purchase foods with higher nutritional quality in preference to other types of food.<sup>32</sup> To this end, the offer of fruits, vegetables, wholegrains, legumes, nuts and fish should be promoted, whereas the availability of red and processed meat should be limited, as should ultra-processed foods and beverages rich in sugar, salt and/or *trans* fats, such as industrial baked and fried snacks, confectionery, soft drinks and industrial juices. Within ready-to-eat food establishments, such as street food stalls, cafeterias and vending machines, guidelines for safe and healthy food preparation should be adopted to create healthier eating environments. The implementation of discounting strategies for safe and healthy products that might not, at first sight, appeal to consumers (because of their imperfections, short expiry date, etc.) would also promote local, healthy and affordable foods while reducing food loss.<sup>33,34</sup>

## 4.6 Health promotion and communication

Health promotion through communication is the use of communication strategies to inform people and influence their decisions and actions in order to improve health.<sup>35</sup> As such, health promotion and communication strategies must be integrated into the foundations of all health policies towards safe and healthy food in markets.<sup>36</sup>

Food promotion – the marketing or advertising of food – directly influences consumers' food preferences, nutrition knowledge, diets and health. However, the transformative potential of communication to change people's health and consumption behaviours can happen in either a positive or a negative way. Advertising of ultra-processed foods, which is widely present in society, calls for stronger government regulatory efforts to restrict excessive promotion of unhealthy foods, especially to children and adolescents, and to ensure healthier food environments. This can be achieved by regulating private sector marketing and advertising of foods and drinks (either in the marketplace or through media) while implementing public measures to provide consumers with complete and unbiased information.<sup>2</sup> Food promotion and marketing techniques could also be

A MEAT VENDOR IN A  
TRADITIONAL FOOD  
MARKET IN KAZAKHSTAN





used at the point-of-sale level to spread healthy food messaging in traditional food markets (for instance, by means of posters carrying important health and nutrition messages, or signs marking specific shelves with fresh/healthier/local/organic food options) or to encourage purchase of healthier food options (for instance, by introducing tasting activities for unprocessed foods such as fresh fruit and vegetable juices, nuts or wholegrain snacks, etc.).

The effectiveness of health communication strategies is highly dependent on people's ability to understand the message. As such, all health promotion strategies should be developed in a way that takes account of the current health literacy of the local population and their ability to change behaviour. Also, improving consumers' food and nutrition knowledge and awareness is vital if health promotion interventions are to be successful. Food and nutrition education programmes can be implemented at the market level through theoretical and practical group sessions, with themes adapted to the specific needs of the community. Examples include (among others) dietary needs and recommendations; popular misinformation; how to prepare safe and nutritious meals; how to plan and shop for healthy meals; nutritional composition of foods; the association between good nutrition and health; and how to read labels correctly.<sup>37</sup>

Based on the success of the Five Keys to Safer Food, WHO developed the 3 Fives concept, providing simple messages to people on how to improve their health through safer food, healthy diets and physical activity.<sup>38</sup> The 3 Fives provide three sets of five simple messages on how to prepare food safely, what to eat to be healthy, and how to keep moving to stay in good shape (Fig. 3).

In many countries of the WHO European Region, social media has become a pivotal tool for informal communication and rapid exchange of information. Social media and mobile phones provide invaluable opportunities for communicating with the public and promoting healthy lifestyles and should be used proactively to promote safe and healthy food in traditional food markets.

Labelling of prepackaged foods is a useful tool to inform consumers about the composition and origin of a food product and to guide them to make healthy choices. A food label includes information on the ingredients and/or nutritional composition of the food product. The WHO European Region has issued a recommendation that nutrition labelling standards for food products produced and sold in the Region should be harmonized and that such labelling should be made more interpretative and consumer-friendly. Major food industry stakeholders have adhered to such considerations in recent years, while also reformulating food products to reduce the content of sugars, sodium and *trans* fats.<sup>38</sup> In many traditional food markets across the WHO European Region, industrially produced foods are less common than raw and homemade foods\* sold by small manufacturers (such as bakeries). Small-scale producers may not have the capacity to comply with applicable food labelling standards and guidelines. Several homemade foods sold in traditional food markets in central Asia and eastern Europe have been identified as high in sodium, saturated fatty acids and *trans* fatty acids.<sup>13–19</sup> In order to make this information accessible to consumers, it is recommended that the labelling of homemade food products available in traditional food markets is brought into compliance with the *Codex Alimentarius* general standards for prepackaged foods.<sup>39</sup>

\* Homemade foods are defined as self-prepared food products, either at home or on the street/at the market, even if processed or ultra-processed ingredients (such as oils, sugar and sauces) are used.

# The 3 Fives

## Five keys to safer food.

- 1 Keep your hands and all surfaces clean
- 1 Separate raw and cooked foods
- 1 Cook thoroughly
- 1 Keep food at safe temperatures
- 1 Use safe water and raw materials



**Fig. 3.** WHO's 3 Fives concept to promote safer food, healthier diet and appropriate physical activity

## Five keys to a healthy diet.

- 1 Breastfeed for the first six months of life
- 1 Eat a variety of foods
- 1 Eat plenty of vegetables and fruit
- 1 Eat moderate amounts of fats and oils
- 1 Eat less salt and sugars

## Five keys to appropriate physical activity.

- 1 Start regular physical activity and reduce sedentary activities
- 1 Be physically active every day in as many ways as you can
- 1 Do at least 150 minutes per week of moderate-intensity physical activity
- 1 If you can, do some regular vigorous-intensity physical activity
- 1 School-aged young people: do at least 60 minutes per day of moderate to vigorous-intensity physical activity

These include the name of the food; ingredients list (including additives and allergens); date marking; name and address of the manufacturer; net content of the food; lot identification; country of origin; and instructions for use and storage of the food. Such labelling would not necessarily be required on the packaging of products sold in bulk, as the information regarding the product may be displayed in another way at the vending site.

The use of digital media in the promotion of healthy and sustainable diets could be another promising and innovative approach, using technology to contribute to health and well-being.<sup>40</sup> An example would be the development of an online platform (such as a website or mobile app) functioning as a health education tool; this could be used to search for health and nutrition topics (such as heart disease or *trans* fatty acids), to seek food vendors meeting certain criteria for a healthy food offer (this could be linked to the "Healthy food" seal; see Box 1), or to learn more about wellness activities within the community. For this tool to work as a real health promoter, such a platform would have to be based on a continuously updated database, with information from certified sources.

## “Healthy food” seal: an example of health promotion

A possible strategy to promote safe and healthy food products in traditional food markets would be the creation of a “Healthy food” seal to be displayed by market vendors whose food products meet certain predefined standards (use of locally produced and/or healthier ingredients, safe food-handling practices, etc.). Such a strategy would be multifaceted, rewarding food vendors/retailers for complying with safe and healthy food standards while empowering consumers to make healthier food choices. The seal would have the additional benefit of being used in nutrition education/marketing campaigns, and its use could ultimately be extended to a number of stakeholders along the food supply chain.

### 4.7 Procedures for emergency response

Traditional food markets are vulnerable to emergencies and disasters that could have an impact on the safety and quality of the food they sell or serve to consumers. However, in times of crisis, traditional food markets also serve to enhance food security by providing safe and healthy food to local communities.

Emergencies may include natural disasters, extreme weather events such as flooding and drought, fires, and disease outbreaks. It is important that traditional food markets have plans in place to deal with emergency situations, and emergency response plans must be designed to reflect country-specific considerations and characteristics of the market. These may include the types of food or animals that are sold, the physical location of the market, the customer base, the facilities available and the legal basis for market operations.

An emergency response plan must include a clear description of roles and responsibilities across the various government agencies responsible for the market, as well as the responsibilities of market vendors and workers. It must also include requirements for market vendors to keep records of their suppliers and measures to quickly remove contaminated or potentially contaminated foods from the market if required. Procedures for communication between government agencies, market authorities, market vendors and consumers must be in place, and regulations to close traditional food markets (or specific parts of them), temporarily or permanently, must be adopted and implemented when necessary (for instance, in situations when the market is the origin of the incident or emergency).

# 5. Stepwise approach to implementation of healthy traditional food market initiatives



Traditional food markets in the WHO European Region are diverse in terms of their organization, layout and food supply, and countries have different means to address food safety and nutrition issues. Efforts to improve food safety and nutrition in traditional food markets must, therefore, be tailored to specific market needs and priorities. Recognizing this diversity, this guidance promotes a stepwise process to assess the current situation, identify food safety and nutrition issues, decide on priorities for improvements, identify necessary interventions, develop an action plan, implement interventions and monitor performance (Fig. 4).

The successful and sustainable implementation of an initiative to promote safe and healthy foods in traditional markets is dependent on the partnership and shared vision of several agents, including local administration and health authorities (and market managers, in the case of private administration), suppliers (such as farmers and transportation/logistics entrepreneurs), vendors, other market workers and consumers. The process should start by defining a multisectoral task force, including at least one representative from each of these groups and preferably a local health authority. The task force should be responsible for detailing needs, prioritizing activities, developing a workplan, mobilizing resources, and facilitating enforcement, monitoring and evaluation.

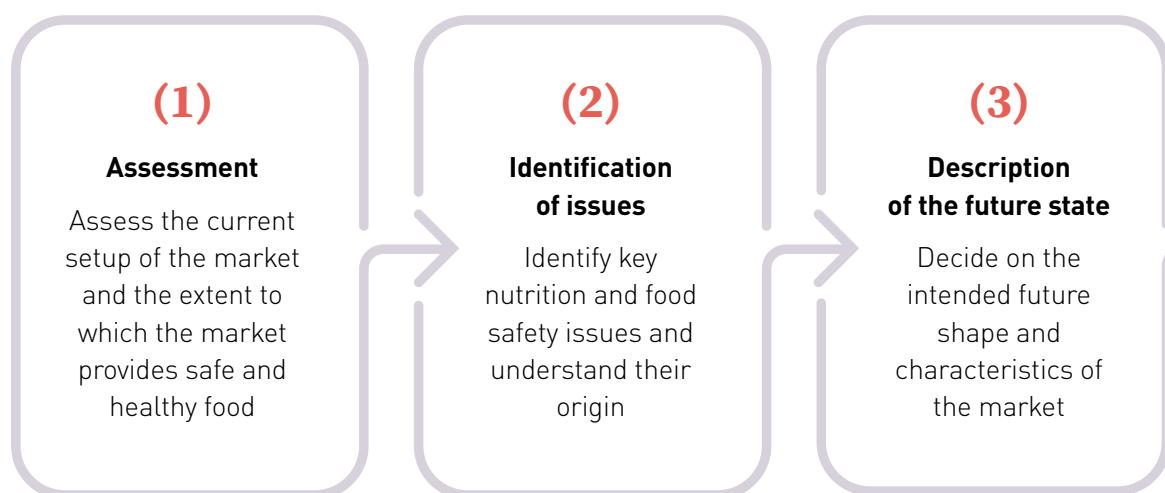
## 5.1 Assess the current setup of the market and the extent to which it provides safe and healthy food

To improve food safety and nutrition in traditional food markets, it is necessary to conduct a preliminary assessment of the market and the extent to which it provides safe and healthy food. The initial assessment of the market setup should focus on the infrastructure and operational environment. The information summarized in Table 1 (page 9) should be registered by direct observation and an auxiliary checklist (ideally electronic).

The assessment may be made by means of a survey, consisting of a structured questionnaire or focus group discussions (in person or web-based, defined by the task force), conducted among members of the market community, to identify their concerns and possible solutions from their viewpoints. Local authorities should provide information on the size of markets and, for each market, the number of vending sites and the estimated number of visits daily. This process could be facilitated by the multisectoral task force.



**Fig. 4.**  
Stepwise  
approach to  
improving  
food safety  
and nutrition  
in traditional  
food markets



Mapping the existing vending sites and their basic food availability and food safety characteristics is also essential. This could be performed by applying a checklist-based structured questionnaire (ideally electronic).

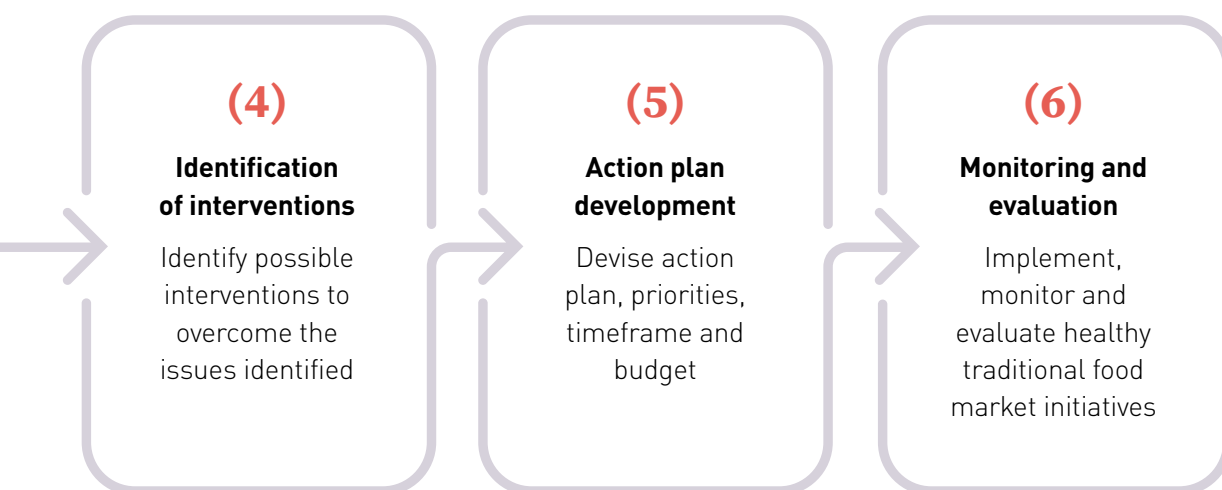
**The questionnaire should include a registry of:**

1. Vending site and business characteristics
  - 1.1 Typology (mobile versus permanent vending site)
  - 1.2 Type of physical setup (e.g. formal, such as stands, stalls or trucks; informal, such as pushcarts; displaying foods on the floor or freezers; selling soft ice cream or beverages)
  - 1.3 Dimensions
  - 1.4 Number of vendors and other employees
  - 1.5 Operating hours
2. Types of product available (specifying raw, ready-to-eat, homemade and/or industrial)
3. Availability of health promotion materials
4. Availability of basic food safety conditions

The implementation of additional techniques, such as direct observation of food vending and/or purchasing actions, may provide more in-depth information on specific topics.

## **5.2 Identify key nutrition and food safety issues and understand their origin**

The task force should be responsible for evaluating the findings of the assessment, which should then be presented and discussed among all the members of the task force. Then, by adopting a risk-based approach, key food safety and nutrition issues should be identified and prioritized for action.



**Regarding nutrition, the main issues to consider should include:**

1. Availability and access to different food products, such as fruits and vegetables and other staple foods, ready-to-eat foods (homemade and industrial) and beverages
2. Nutritional composition of the most commonly available foods (*trans* fats, salt, sugar, etc.)
3. Usual practices of food preparation and ingredients used
4. Food and nutrition labelling
5. Food literacy/health promotion
6. Sustainability

**From the food safety viewpoint, the main issues to consider should include:**

1. Personal hygiene and food-handling practices
2. Temperature control
3. Cleanliness
4. Vending site layout
5. High-risk areas for transmission of communicable diseases
6. Access to clean water and waste management

Additional topics may be considered, according to their local or cultural importance. Some possible nutrition and food safety issues likely to emerge in this step, and their origin, are shown in Annex 1.

### **5.3 Decide on the intended future shape and characteristics of the market**

Based on the initial assessment of the setup of the market, as well as on the identification of the main nutrition and food safety issues and needs, it may be possible to draw initial conclusions about the intended future characteristics of the markets (focus on a timeframe of 1–5 years). A set of recommended/desired market characteristics to improve or implement in the future should

be listed. Brainstorming or other creative thinking techniques, as well as more systematic approaches such as SWOT\* analysis, conducted among task force members, might be feasible in this step.

Potential topics to emerge in this step may be related to physical infrastructure, market operating conditions, food environment and health promotion practices, among others. These are described in more detail in the next step (5.4).

## **5.4 Identify possible interventions to overcome the issues identified**

Based on the initial conclusions reached in the previous steps, the task force should determine the interventions to be implemented on both nutrition and food safety fronts, taking into account the most urgent or concerning issues encountered, as well as the objectives to be achieved in future stages. For each intervention, a set of specific measures should be planned, always bearing in mind the specific conditions (needs versus resources) of the market.

Possible interventions may include improvement of the physical environment; monitoring services; accessibility to health services for market workers; safety and nutritional quality of the foods and beverages available; food pricing and labelling regulations; population awareness of topics related to nutrition and food safety; and expansion of market services to cover e-commerce solutions. Examples of possible interventions are shown in Annex 1.

## **5.5 Devise action plan, priorities, timeframe and budget**

The development of a clear, pragmatic and realistic action plan is essential for the success of any initiative to promote safe and healthy food in traditional markets. To this end, a number of features should be considered when designing a work plan: tasks (including description, priority level, specific objectives and person(s) responsible); timeframe; definition of measurable monitoring and evaluation indicators; and resources needed. The action plan should also clearly distinguish between governmental and community-based interventions.

Feasibility must be guaranteed in all aspects of the action plan, both in terms of the amount of work that is planned and the time and resources that are needed. The tasks schedule must be carefully thought out and include a distinction between short-, medium- and long-term actions and a clear definition of the time deadlines proposed for each. When defining the budget, the expenditure predicted for carrying out the various tasks must be balanced against possible sources of financing. Funding of interventions could include grants, loans, financing from nongovernmental organizations, and in-kind contributions, among others.

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\* Strengths, Weaknesses, Opportunities and Threats.

## 5.6 Implement, monitor and evaluate healthy traditional food market initiatives

Implementation of the planned interventions is a central step that should comply with the work plan and the defined timeline. In this stage, principles such as coordination, cooperation, transparency and frequent communication among all stakeholders are particularly important.

After implementation, it is necessary to monitor and evaluate the progress made. For this, specific milestones should be set for the short, medium and long term. The previously defined indicators for monitoring and evaluation will allow the task force to understand whether the defined objectives are being successfully achieved. The monitoring methodology varies across the different components of the traditional food market to be evaluated. Assessment could be made through direct observation, checklists, interviews based on structured or semi-structured questionnaires, and chemical and/or microbiological analyses of foods, among others. It is the responsibility of the task force to decide, for each objective to be met, on the most cost-effective method(s).

The time and frequency of external monitoring actions (for instance, audits) must be defined depending on each specific objective and what is possible in each setting. Nevertheless, continuous self-monitoring should be carried out by each traditional food market community. Sustainable implementation of initiatives to promote safe and healthy foods in traditional markets should ensure adaptation to ever-changing market needs and consumer expectations. As such, it is essential to empower and encourage each traditional food market community to build an adequate and effective monitoring system.







## 6. Issues of particular importance to markets in the context of COVID-19

The COVID-19 pandemic has been driven by human-to-human transmission. The virus can spread directly from person to person when someone infected with COVID-19 coughs or sneezes, producing droplets that reach the nose, mouth or eyes of another person. Alternatively, the respiratory droplets can land on objects and surfaces surrounding the infected person. Someone may become infected by touching a contaminated surface or object, or the hand of an infected person, and then touching their mouth, nose or eyes.<sup>41</sup>

There is no evidence that food is implicated in the transmission of COVID-19. Similarly, there is no evidence that the virus responsible for the current COVID-19 pandemic is carried by domestic food-producing animals, such as poultry, pigs, sheep and cattle. However, it is likely that the virus which causes COVID-19 has its origin in wild animals, as it belongs to a group of coronaviruses that are usually found in bat populations.<sup>42</sup>

In some countries in the WHO European Region, traditional food markets offer live animals for sale. These markets pose a particular risk of pathogen transmission from animals to humans, as well as between animals. Typical high-risk areas for transmission of pathogens in traditional food markets are places where live animals are kept or caged and slaughtered. The slaughtering process is also high-risk, as people may be exposed to body fluids, faeces and animal waste.

While the sale and slaughtering of captured live wild animals should be prohibited, the sale of farmed captive wild animals and domestic live animals may be acceptable if animal health and welfare regulations, strict biosecurity measures, and food and meat hygiene standards are strictly followed during production, processing and marketing. Risk reduction requires that animals are sourced from approved, registered and controlled farms and that they are slaughtered in approved facilities which are separated from areas of the market to which the public has access and are subject to risk-based meat inspection.

Traditional food markets are often congested as they gather many people in often small spaces. Physical distancing is very important to help prevent and slow the spread of communicable diseases such as COVID-19. The risk of transmission can be reduced by minimizing contact between people and keeping a physical distance of at least 1 m.

Physical distancing in crowded market settings can be challenging. Possible ways to encourage physical distancing and reduce physical interaction between people include: designing one-way systems so that customers can move between stalls while remaining at least 1 m apart; regulating the number of customers who enter the market to avoid overcrowding; placing alert notices and posters providing practical advice on how to reduce the risks of disease transmission; painting floor markings consistent with physical distancing advice on entry to

the traditional food market; providing hand sanitizers, spray disinfectants, and disposable paper towels at the market entry points; encouraging customers visiting the market to wear face masks to reduce the risk of disease transmission; and introducing plexiglass barriers to physically separate market traders from the public and encouraging the use of contactless payments.

Market workers and the general public visiting traditional food markets need to understand how to prevent the spread of COVID-19. The following actions can help reduce the risk of transmission of COVID-19 and other infectious diseases: good personal hygiene practices, including good hand hygiene and frequent use of alcohol-based hand sanitizers; good respiratory hygiene (covering mouth and nose when coughing or sneezing; disposing of tissues and washing hands); avoiding touching eyes, nose or mouth with hands; frequent cleaning and disinfection of work surfaces; avoiding close contact with anyone showing symptoms of respiratory illness; and avoiding contact with live animals and surfaces potentially contaminated with animal waste.<sup>42</sup>









# Examples of possible nutrition and food safety issues in a traditional food market

Issue/risk/challenge	Context	Possible interventions
<b>Nutrition</b>		
High availability of homemade ready-to-eat foods rich in sodium and unhealthy fat content (e.g. saturated and <i>trans</i> fatty acids).	<ul style="list-style-type: none"> <li>• Unhealthy fats and oils, as well as sodium-rich ingredients (e.g. sauces, stocks), traditionally used as ingredients in some local recipes.</li> <li>• Low price of ingredients with high potential to increase palatability.</li> <li>• Methods of preparation (e.g. frying or deep frying, reuse of oils over the accepted limit).</li> <li>• Customer expectation and preference.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>• Identification of the ingredients most commonly used by food manufacturers.</li> <li>• Nutrition education interventions with vendors and small manufacturers, aiming to: replace the use of ingredients rich in unhealthy fats and sodium by healthier options; promote healthier cooking techniques; increase nutrition literacy and awareness of the harmful effects of excessive consumption of unhealthy fats and sodium.</li> <li>• Incentives to increase vendors' adherence to safe and healthy food standards (e.g. food labelling, economic incentive by providing healthier ingredients at lower cost).</li> <li>• Nutrition education campaigns for consumers at the market or local level, aiming to: increase responsible purchases of healthy foods and beverages; increase nutrition literacy and awareness of the harmful effects of excessive consumption of unhealthy fats and sodium; promote recipes for healthy versions of traditional foods and dishes to cook at home with fresh ingredients available in the market; empower consumers to read and better understand food labels.</li> </ul> <p><b>Medium and long term</b></p> <p>Adapt market regulations:</p> <ul style="list-style-type: none"> <li>• Reallocate healthy food vending sites to more visible areas of the market.</li> </ul>
High availability of highly processed ready-to-eat foods, usually energy-dense, rich in sugar, salt and unhealthy fat.	<ul style="list-style-type: none"> <li>• Low price.</li> <li>• High customer acceptance/preference.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>• Incentives to vendors to display healthier options, such as homemade alternatives prepared with healthier ingredients, as well as ready-to-eat snacking options including fruits, vegetables, nuts, wholegrains and other core foods, using locally produced ingredients (e.g. "Healthy food" seal proposed in Box 1, page 16).</li> <li>• Nutrition education campaigns for consumers to encourage responsible purchases of healthy foods and beverages, improvement of consumers' nutrition literacy and awareness of the harmful effects on health of excessive consumption of highly processed food products.</li> </ul> <p><b>Medium and long term</b></p> <p>Adapt market regulations:</p> <ul style="list-style-type: none"> <li>• Limit the permitted amount of ultra-processed food products available at each vending site.</li> <li>• Reformulation of food products by the food industry to improve their nutritional profile (e.g. lower energy density, lower content of total fat, saturated and <i>trans</i> fatty acids, sugar and sodium).</li> </ul>

Issue/risk/challenge	Context	Possible interventions
Weak sale of fresh food products such as fruits and vegetables, leading to food waste.	<ul style="list-style-type: none"> <li>• Customers' fear of visiting the market and being contaminated with infectious diseases.</li> <li>• High price.</li> <li>• Low consumer awareness about the health benefits of consuming fresh products such as fruits and vegetables.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>• Public disclosure of the measures taken by local authorities to ensure the safety of vendors, customers and food products, through multiple channels (media, social networks, etc.).</li> <li>• Availability of less appealing fruits and vegetables at lower prices.</li> <li>• Nutrition education campaigns encouraging consumption of fresh products such as fruits and vegetables; improvement of nutrition literacy among consumers.</li> </ul> <p><b>Short, medium or long term</b></p> <ul style="list-style-type: none"> <li>• Expansion of the market to cover e-commerce solutions (e.g. creation of the market website; integration of a wide range of producers, vendors and interested stakeholders in an online platform allowing online/telephone orders, home deliveries, and mobile vending outside the market premises).</li> </ul>
Frequent purchases of sugar-sweetened beverages (SSBs).	<ul style="list-style-type: none"> <li>• High availability of SSBs.</li> <li>• Customer preference.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>• Incentives to vendors to display healthier options, such as water and fresh fruit-juice based drinks, using locally produced ingredients (e.g. provision of low-cost mature or "unappealing/ugly" fruits, which regular consumers would not buy).</li> <li>• Nutrition education campaigns for consumers to encourage responsible purchases of healthy foods and beverages; improvement of consumers' nutrition literacy and awareness of the harmful effects on health of excessive consumption of sugary foods and SSBs.</li> </ul> <p><b>Medium and long term</b></p> <p>Adapt market regulations:</p> <ul style="list-style-type: none"> <li>• Limit the permitted amount of certain types of beverages, such SSBs and alcoholic beverages, available at each vending site.</li> <li>• Reallocate healthy food vending sites to more visible areas of the market.</li> </ul>
<b>Food safety</b>		
Risk of cross-contamination between live animals, ready-to-eat food and humans.	<ul style="list-style-type: none"> <li>• Inappropriate physical infrastructure.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>• Reallocate vendors according to the types of food products sold.</li> <li>• Separate areas for selling and slaughtering live animals from areas open to the general public.</li> <li>• Implement veterinary supervision of the slaughtering of live animals.</li> <li>• Implement good hygiene and sanitation standards for workers.</li> </ul> <p><b>Medium and long term</b></p> <ul style="list-style-type: none"> <li>• Provide training for food handlers and market workers.</li> <li>• Provide adequate waste management systems.</li> <li>• Phase out the sale and slaughter of live animals.</li> <li>• Upgrade sanitary facilities (toilets, handwashing), pest control, waste management, drains and sewage.</li> </ul>

Issue/risk/challenge	Context	Possible interventions
Risk of transmission with infectious diseases such as COVID-19.	<ul style="list-style-type: none"> <li>• High concentration of people in small spaces.</li> <li>• Poor understanding of respiratory etiquette and good hygiene practices.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>• Redesign the circulation of people inside the market (e.g. keeping to the right and following a predefined circuit; specific doors designated for entry and exit).</li> <li>• Implement restrictions on the maximum number of people in the market at the same time, combined with strict monitoring.</li> <li>• Implement measures to spread people out and avoid congregation.</li> <li>• Place warning notices at entry points requesting customers not to enter the market if they have symptoms of COVID-19 or other infectious diseases.</li> <li>• Implement queue control by painting floor markings consistent with physical distancing advice on entry to the traditional food market.</li> <li>• Provide hand sanitizers, spray disinfectants and disposable paper towels at market entry points.</li> <li>• Use floor markings inside the market to facilitate compliance with physical distancing.</li> <li>• Encourage customers visiting the market to wear face masks to reduce the risk of transmission of diseases between infected people.</li> <li>• Introduce plexiglass barriers to physically separate market traders from the public.</li> <li>• Encourage the use of contactless payments.</li> <li>• Encourage market workers to report symptoms of COVID-19 and other infectious diseases to local health authorities and not to enter the market if they feel unwell.</li> </ul>
Contamination of fresh produce and ready-to-eat food.	<ul style="list-style-type: none"> <li>• Poor cleaning and hygiene standards.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>• Advise the public to wash fruits and vegetables.</li> <li>• Encourage the public and market workers to always strictly observe good personal hygiene practices around open food areas.</li> <li>• Keep food at a safe temperature (i.e. above 60 °C or below 5 °C).</li> <li>• Use safe water and raw materials.</li> <li>• Separate raw and cooked food.</li> </ul>
Limited knowledge and awareness of food safety and risks of food contamination.	<ul style="list-style-type: none"> <li>• Market workers with limited or no training in food safety.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>• Implement simple food safety training sessions for market workers and stall holders in line with the WHO Five Keys to Safer Food, which minimally disrupt busy working schedules.</li> <li>• Tailor simple and easily understood information messages for dissemination via a number of different platforms, including social media and mobile phones, to encourage behavioural changes.</li> </ul> <p><b>Medium and long term</b></p> <ul style="list-style-type: none"> <li>• Develop education strategies and materials for food handlers and consumers consistent with existing levels of awareness.</li> <li>• Develop and implement communication and training programmes aimed at reducing the risk of disease transmission in a low-cost and sustainable manner and adapted to local context.</li> </ul>
Weak and inconsistent legal framework for food safety in traditional food markets.	<ul style="list-style-type: none"> <li>• Outdated and/or inconsistent food laws, regulations and standards across sectors.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>• Prepare and implement preliminary measures for food handling, preparation and sale in traditional food markets.</li> </ul> <p><b>Medium and long term</b></p> <ul style="list-style-type: none"> <li>• Review the legal framework for food safety pertaining to traditional food markets and identify gaps and inconsistencies.</li> <li>• Develop, adopt and implement legal measures for nutrition and food safety risk management in traditional food markets in line with <i>Codex Alimentarius</i> and applicable national regulations and standards.</li> </ul>

Issue/risk/challenge	Context	Possible interventions
Weak enforcement of food safety regulatory requirements.	<ul style="list-style-type: none"> <li>Limited knowledge and skills of food inspectors and market authorities in conducting risk-based food inspection activities.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>Allocate adequate resources to implement risk-based food inspection activities in the market.</li> <li>Establish a registry of food businesses in the market and categorize them according to food safety and non-compliance risk.</li> <li>Establish an inspection record system and use it as a basis for conducting risk-based food inspection activities.</li> <li>Develop guidelines and checklists for use by food inspectors in traditional food markets.</li> </ul> <p><b>Medium and long term</b></p> <ul style="list-style-type: none"> <li>Develop and implement clear procedures for risk-based food inspection activities in traditional food markets.</li> <li>Develop and implement training programmes for food and veterinary inspectors.</li> <li>Develop training plans and maintain training records for all food inspectors.</li> </ul>
Poor management of food safety incidents and emergencies.	<ul style="list-style-type: none"> <li>No food safety emergency plans and procedures in place.</li> </ul>	<p><b>Short term</b></p> <ul style="list-style-type: none"> <li>Develop and test procedures for recalling and withdrawing contaminated and potentially contaminated food from traditional food markets.</li> </ul> <p><b>Medium and long term</b></p> <ul style="list-style-type: none"> <li>Develop and test tailored food safety emergency response plans as part of broader emergency and disaster preparedness and response plans.</li> <li>Develop and test procedures for communication between market vendors, market authorities and health authorities in cases of food safety incidents and emergencies.</li> </ul>







World Health  
Organization

REGIONAL OFFICE FOR Europe

## The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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## World Health Organization Regional Office for Europe

UN City, Marmorvej 51  
DK-2100, Copenhagen Ø, Denmark  
Tel.: +45 45 33 70 00  
Fax: +45 45 33 70 01  
Email: [eurocontact@who.int](mailto:eurocontact@who.int)  
Website: [www.euro.who.int](http://www.euro.who.int)

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