

Healthy and Sustainable Diets

Key workstreams in the WHO European Region

Factsheet | 2021



World Health
Organization

REGIONAL OFFICE FOR Europe

Abbreviations

- AI** artificial intelligence
- NCD Office** WHO European Office for the Prevention and Control of Noncommunicable Diseases
- NCD** noncommunicable disease
- OOH** out-of-home

Healthy and sustainable diets in the WHO European Region

The food system is in a constant state of evolution, with consumer preferences, production systems and policies shifting over time. Public health systems are also under pressure as noncommunicable diseases (NCDs) such as obesity, diabetes and cancer pose threats to long-term health. At the same time, food systems contribute substantially to climate change, biodiversity loss and the depletion of natural resources. Changes in food systems will not only have to address the rise in diet-related NCDs but will also need to promote a shift towards environmentally sustainable diets. This will be no easy task, nor can we do it alone.

Human health and planetary health are deeply interconnected. For this reason, the WHO European Office for the Prevention and Control of Noncommunicable Diseases (NCD Office) is engaging in various projects concerning healthy and sustainable diets. Reflecting the needs and concerns of Member States, these exploratory actions aim to provide evidence-based actions on issues such as dietary shifts, food reformulation, digital food environments and public procurement.

WHO/Europe's action areas on healthy and sustainable diets

Given the scale of the public health and environmental challenges at hand, numerous institutions are contributing to building healthier and sustainable food systems. What roles can the NCD Office play?



Convening experts and Member States and discussing topics related to healthy and sustainable diets, a component of food systems.



Training and capacity building through the translation of scientific evidence into easy-to-understand formats. This includes the development of user-friendly training modules to assist public health officers in Member States to provide better guidance on healthy and sustainable diets.



Conducting original research, together with WHO collaborating centres and other partners, on topics that fall within the interconnected areas of healthy and sustainable diets, public health and NCDs.

Laying the foundation of our work

In October 2019, the NCD Office hosted an expert meeting investigating dietary patterns for health and sustainability in the WHO European Region. Together with WHO collaborating centres and additional interdisciplinary experts, the meeting discussed how to support Member States in formulating national and Europe-wide dietary guidelines that consider both human and planetary health. This meeting was the first step to laying the foundation of our current and future work.

During the 2019 meeting, group work sessions and panel discussions covered topics such as the generation of guidelines and policies, capacity-building interventions, stakeholder involvement, and technical aspects of food production and reformulation. **Experts presented the latest evidence, preliminary results, and new approaches to healthy and sustainable diets.** For example, an important step towards assessing the environmental impacts of diets is to focus not only on greenhouse gas emissions but also on other indicators such as land and water use. Also highlighted was the importance of shared data platforms and comparable methodologies to achieve impactful regional and national data comparisons and analyses. These methods should be used more frequently to inform governments, policy-makers and the general population, among other stakeholders. Such knowledge will contribute to greater understanding of the importance and impact of healthy and sustainable diets for both human and planetary health. Experts also requested the development of clearer guidelines, including dietary guidelines that were categorized by food groups rather than nutrients.

Different approaches to empower consumers and increase their awareness were presented. One approach was to use real-time dietary data to provide information not only on the energy and nutritional value of a food product but also on its climate impact. Evidence was presented on the environmental footprint indicators that are currently used and the merits of moving towards more impactful indicators. There was support for more analyses of the relationship and connection between healthy, environmentally sustainable and affordable diets.

Specific key outcomes from the discussions are presented below in the form of **data and implementation gaps**. A detailed analysis of the insights gained during the expert meeting, as well as a description of the methods used, will be published in a peer-reviewed scientific paper in 2021. A follow-up expert meeting (virtual) is also planned for March 2021.



Data and implementation gaps

During the 2019 expert meeting, various data gaps and necessary actions were identified by the experts.



Standardizing research methods

Standardized research methods and the use of common language are a **precondition for valuable data collection, analysis and comparison**. Experts pointed out the difficulty of comparing research results when using different definitions, indicators and guidelines.



Engaging stakeholders

One important stakeholder group is citizens. Clear dietary guidelines and strong media campaigns need to be developed in cooperation with social scientists and behavioural insights experts to **involve citizens in the process of improving diets**. The involvement of industry and the translation of research to practical materials that can be used by policy-makers are essential to improve the information flow between research, stakeholders and practice.



Filling the gaps between research and practice

Although research on healthy and sustainable diets is increasing globally, the implementation gap between research and practice remains. Experts recommend **dissemination of research results** to different stakeholder groups in an understandable way. Active involvement and close collaboration between stakeholders to translate evidence into practice were also recommended.



Guidelines and food labelling

The experts described a lack of **clear definitions and strong dietary guidelines** that are culturally appropriate, feasible and promoted in evidence-based reports. They stressed the importance of visible information on the nutritional value of food products, as well as information on their environmental impact. Socioeconomic factors should be at the forefront of discussions, as safe, nutrient-dense food should be accessible and affordable for all.



Shifting dietary patterns

Core changes should be brought about not only by shifting dietary patterns towards a more **plant-based diet** but also by decreasing the amount of **processed food** consumed and minimizing portion sizes.

Taking action

Experts are continuously working on methods and approaches to successfully define the characteristics of desirable dietary patterns and to address barriers to achieving them. Actions required include the development of food-based dietary guidelines by a variety of experts. In addition, the development and implementation of a well-functioning monitoring system would allow insights into changes in trends and provide a valuable tool to support the development of a sustainable food system. Further actions need to be implemented at both a local and a regional level. The public should be educated (for instance, by public campaigns and in schools) and supported in their food choices (for instance, with clear labelling that shows both nutrient information and environmental impact). To create a healthy and sustainable environment, the food industry should be involved and supported in reformulating and making moves towards a more sustainable production of healthier foods.

To develop sustainable food systems, a number of things are required: feasible, evidence-based guidelines and policies developed by multisectoral expert teams; better cooperation between different stakeholder groups; sustainable public food procurement; capacity-building interventions; and well-implemented monitoring and evaluation systems.

Key workstreams

Since the expert meeting in 2019, further scientific studies have been published that stress the need to shift diets by increasing the consumption of vegetables, fruits, legumes, wholegrains, seeds and nuts and by limiting the consumption of processed and unprocessed red meat and reducing food waste. The food system has continued to evolve too, with expanding digital food environments and a growing number of citizens who are willing to eat more plant-based diets. Simultaneously, a core team at the NCD Office has been progressing several workstreams to support countries in their requests for more clarity on how to change dietary patterns and facilitate knowledge-sharing. These workstreams are detailed below.

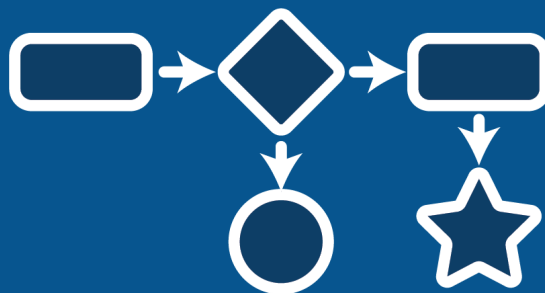


1

Food-profiling model for healthy and sustainable diets

To classify and rank foods according to their nutritional composition and environmental impact, food-profiling models are required. The development of a standardized model that can assess the health and environmental credentials of individual food products requires methodological guidance so that consistent and comparable data can be produced. The challenge is that **we do not currently have a standardized model for nutrition and sustainability**, as there is often no consistency or comparability between environmental and health indicators. In addition, the models that currently exist focus mainly on greenhouse gas emissions as an indicator of environmental impact. Food systems are complex and greenhouse gas emissions are just one of many environmental indicators that need to be considered.

This workstream comprises a systematic review of profiling models and their accompanying algorithms that allow calculation and ranking of multiple environmental impacts or the environmental and nutritional impact of individual food products. The outcome of this work will **inform the development of a user-friendly food-profiling model that uses nutritional and environmental indicators**. This will enable policy-makers in Member States to assess their national diets and promote appropriate foods. It can also be used to inform the development of the sustainable food-labelling framework under the European Union Farm to Fork Strategy.



2

Data platform for modelling healthy and sustainable dietary patterns

As the number of societal challenges associated with poor nutrition and environmental pressures such as climate change and biodiversity loss increases, a growing number of countries have requested support in adapting their diets, at national and subnational level, to accommodate indicators of environmental sustainability in addition to nutrition and health outcomes.

To build capacity in countries to enable them to apply global healthy and sustainable dietary principles to their specific dietary consumption data, the NCD Office is developing a **user-friendly data platform where Member States in the WHO European Region can model diets using their own national datasets**. These models can then be used to adapt local diets to meet health and sustainability goals. The data platform will be open-access.



3

Healthy and sustainable public food procurement

Public procurement policies play an essential role in setting standards for the types of foods required to achieve healthy and sustainable diets in various settings. The procurement of ingredients and foods for public institutions, including schools, hospitals, prisons, day-care centres, care homes and state workplaces, is wide-ranging and has vast potential to improve the diets of several population groups.

The NCD Office is harnessing this potential by developing a manual for public procurement officers in the WHO European Region. This manual **will highlight how to establish tenders for the procurement of healthy and environmentally sustainable ingredients and foods.** It will also include specific information on seasonality and product diversity. A training package for procurement officers is also under development.



4

Dietary shifts and plant-based food products

Processed plant-based products that substitute for animal-source foods are gaining popularity and becoming much more widely available within the WHO European Region. However, data are lacking on the nutritional qualities and health impacts of these foods. Stakeholders, including Member States and public health officers, are concerned that many of these novel products are high in salt, saturated fat and free sugars, with unknown and potentially highly detrimental consequences for obesity and NCD risk. This workstream looks at the **nutritional content of plant-based substitute products in supermarkets and restaurants in the out-of-home (OOH) sector**.

The NCD Office is conducting a study investigating the nutritional content of ultra-processed plant-based foods in the OOH food environment, focusing on vegan burgers sold in restaurants and supermarkets in five European cities. It is also organizing an expert meeting on the OOH sector in spring 2021. The evidence base produced by these two activities will provide vital knowledge that will inform the development of guidelines for ultra-processed plant-based foods.



5

Healthy digital food environments

The expansion of digital food environments, including food delivery platforms, has become turbocharged during the COVID-19 pandemic. At the same time, digital food environments are subject to minimal regulation because they are relatively new in the WHO European Region. This workstream investigates the **apps that facilitate the delivery of snacks and fast food, using artificial intelligence (AI) to assess nudging as a marketing mechanism**. Food delivery apps have an omnipresence that makes them powerful agents of change. Their central placement as distributors in food systems enables them to reach and influence both the restaurant kitchen and the consumer.

This workstream also covers an assessment of the nutrient content of products from supermarkets with an online presence and is developing new tools that use machine learning to monitor interfaces. The **web-scraping platform FoodDB** extracts nutrient, ingredient and other data contained in food package labels on prepacked foods sold online in selected retailers that cover the majority of the domestic market in a given Member State. The NCD Office is currently working with WHO collaborating centres and Member States to extend and pilot the platform.

Another arm of this workstream aims to extract menu and nutrition information from restaurants and food outlets using an intelligent machine-learning technique. This information will be used to create a “data lake” that researchers can use for their research and policy-makers can use to formulate policies to improve the OOH food environment. This will ultimately benefit public health through improved knowledge and awareness of how to make healthier choices when interacting with the OOH food environment.



Food reformulation

Reformulating the recipe of a processed food product – for example, by reducing the fat, sugar or salt content or by increasing the content of wholegrains or vegetables – can help food manufacturers to improve the nutritional content of their products. In collaboration with scientific partners, the NCD Office is developing an **interactive reformulation manual on processed foods for small- and medium-scale enterprises and policy-makers**.

The aim of the manual is to build capacity in countries so that healthier food and beverage environments can be created for all population groups. The manual will be scaled up as further modules covering other nutrients and food groups (including future food products such as ultra-processed plant-based foods) are developed and added.

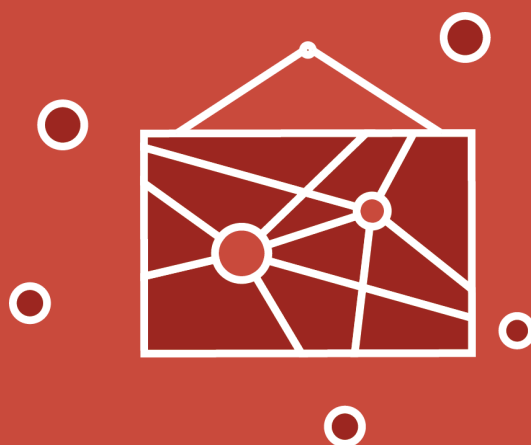


7

Systems thinking in practice

Systems thinking involves many theories and methods that encourage us to look at “the bigger picture” and understand the **interconnectivity between different parts of a system**. It is based on the idea that real-world phenomena exist within systems composed of dynamic actors, including people, organizations and other structures, which evolve in response to each other and their contexts.

Systems thinking has already been embraced by a small number of researchers and practitioners working in the field of NCD prevention, but it is still in the early stages of development and use. Working with research partners, the NCD Office is developing a manual to **promote systems approaches**, including opportunities for in-depth and systematic use of input from different stakeholders through a range of participatory methods.



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.

Document number:
WHO/EURO:2021-2192-41947-57624

© **World Health Organization 2021.**

Some rights reserved. This work is available under the CC BY-NC-SA 3.0 IGO license.

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
Website: www.euro.who.int

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan