



TRAINING ON THE WHO GLOBAL ENVIRONMENT MONITORING SYSTEM FOR FOOD

Sunday, 18 October 2026

INTRODUCTION

The World Health Organization manages the [Global Environment Monitoring System for Food \(GEMS/Food\)](#), a global database that compiles data on chemical occurrences, including contaminants in food. As of October 2026, the database exceeds nine million data points submitted by Member States. These data support dietary exposure assessments and provide scientific advice to decision-makers.

By sharing data on the occurrence of chemical hazards in foods, countries contribute to improving knowledge of the presence and distribution of contaminants in national, regional and global food supplies. These data also provide useful information on national food-monitoring activities and capacities.

Codex Alimentarius food standards set maximum levels based on safety assessments and other legitimate factors, such as the feasibility of meeting the standards. Representative occurrence data are therefore important to ensure that international food standards protect consumer health while accounting for contaminant levels in food supplies and the capacity of food chain operators to meet the standards.

However, participation in GEMS/Food and the submission of occurrence data remain limited in some regions. This may reflect challenges related to awareness, national coordination, data availability and concerns about data interpretation or potential market implications.

This training will introduce participants to GEMS/Food and the procedures for submitting occurrence data. It will also provide an opportunity to discuss national coordination, potential data sources and practical considerations related to data preparation and submission.

The GEMS/Food administrator will present current challenges and opportunities for the future development of the database, followed by an interactive discussion with participants attending the Codex Committee on Contaminants in Foods¹⁹ (CCCCF19).

OBJECTIVES

- increase awareness of the purpose of GEMS/Food and its role in supporting dietary exposure assessment, scientific advice and the development of Codex standards;

- familiarize participants with the requirements and procedures for submitting occurrence data;
- discuss opportunities to strengthen national coordination and identify relevant institutions and potential data sources;
- encourage broader and more consistent participation in GEMS/Food, particularly from currently underrepresented regions; and
- exchange views on current challenges and future opportunities related to the development and use of the database.

PROGRAMME

Time (Cairo Time)	Title	Speaker
11:00-11:05	Opening remarks	Dr Osama Ali Maher, Acting Regional Adviser for Climate Change, Health and Environment, WHO EMRO.
11:05-11:15	Introduction to GEMS/Food	Dr Luc Ingenbleek, Technical Officer Food Safety and Nutrition, WHO HQ.
11:15-11:20	Why is the submission of occurrence data from the EM Region important?	Dr Eva Inam Al Zein, Technical Officer, Food and chemical Safety, WHO EMRO.
11:20-11:35	Case study: Lead in spices	
11:35-11:40	Interactive poll on potential adherence and data submission of countries to the GEMS/Food.	Dr Luc Ingenbleek, Technical Officer Food Safety and Nutrition, WHO HQ.
11:40-11:55	GEMS/Food: current challenges and opportunities.	
11:55-12:00	Q&A	Dr Eva Inam Al Zein, Technical Officer, Food and chemical Safety, WHO EMRO.