

# DEVELOPMENT AND SUSTAINABILITY OF NATIONAL FOOD COMPOSITION DATABASES FOR USE IN DIETARY MONITORING AND PUBLIC HEALTH NUTRITION IN THE EASTERN MEDITERRANEAN REGION

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## Background

- **Noncommunicable diseases** (NCD) deaths are projected to increase to 52 million by 2030 and almost ¾ of all NCD deaths occur in low- and middle-income countries (LMIC).
- **Food Composition Data** (FCD) in the countries of the Eastern Mediterranean regions (EMR) is often missing, incomplete, outdated or unreliable, particularly for fat, sugar and salt of processed foods.
- The improvement of regional FCD is essential to improve the quality of results from **nutrition surveillance systems**, which help to inform policy.

## Aims and Approaches

- Quadram Institute Bioscience (QIB) is working with **World Health Organization's** (WHO) EMRO and aims to develop more comprehensive national FCD and tools to underpin food and nutrition programmes and policies.
- Compiler Countries involved: **Iran, Iraq, Pakistan, Kuwait, Tunisia, Morocco, Sudan, Egypt, Jordan, Mauritania**, and invited West African countries (Burkina Faso, Togo and Côte d'Ivoire).
- 3 training workshops with experts from: UK, Serbia, Portugal and WHO-EMRO delivered activities on:
  - improved **standardized methodologies** to update FCD;
  - **Dietary intake methods;**
  - **Biomarkers;**
  - **Analytical methods;**
  - **Tools.**

Figure: EMR datasets within FoodExplorer platform.



**FoodExplorer, showing open access EMR national datasets**

## Outcomes

- **45 participants** from **13 countries** attended 2 workshops and 3 training exchanges.
- Training included:
  - **Value documentation;**
  - **Food composition data tools:** FoodCASE, Diet Assess and Plan (DAP), Nutritics;
  - **Food classification** and description of composite dishes: LanguaL and FoodEX2;
  - **Recipe calculation;**
  - **EuroFIR e-learning tools** and case studies: [nutritools.org](http://nutritools.org);
  - **Laboratory food analysis** for vitamins, minerals, fibre, amino acids, and fatty acids profile.
- FCD from **6 countries** was standardized using EuroFIR thesauri. The data is now available as **open access** on the EuroFIR **FoodExplorer** platform.



Food Data included in National datasets within FoodExplorer.

	Iran	Iraq	Pakistan	Kuwait	Tunisia	Morocco
N° Food items	91	62	209	107	228	183
N° Food components	36	14	19	96	44	23
N° parameters	3243	850	3762	10271	37152	4209
N° of food group coded food items	89	62	198	0	226	178

## Project Implications and future plans

- **Improved knowledge** of the production of FCD in EMR leading to higher quality food data for stakeholders.
- Initiation of new links and cross-group and country **collaborations and strengthening of existing networks** e.g. between EMR researchers and AFROFOODS, EuroFIR AISBL.
- The capacity building has led to searchable national FCD from developing/emerging countries being made available in an **open access** form for the first time. With future plans for expansion of FoodExplorer to include other EMR countries.
- **WHO-EMRO** is funding further updates of FCD tables and analysis in Jordan, Lebanon, Oman, Sudan, Tunisia, Morocco, Pakistan, Iran, Egypt, and UAE, with the focus on identifying TFA, SFA, salt and sugar in addition to micronutrients.

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