

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

<u>Marisol Warthon-Medina¹</u>, Jenny Plumb¹, Mark Roe², Ayoub Aljawaldeh³, Ailsa Welch⁴, Maria Glibetic⁵, Agnes Kadvan⁵, Jalila El Ati⁶, Helena S. Costa^{7,8}, Henrietta Nkechi Ene-Obong⁹, Paul M. Finglas¹

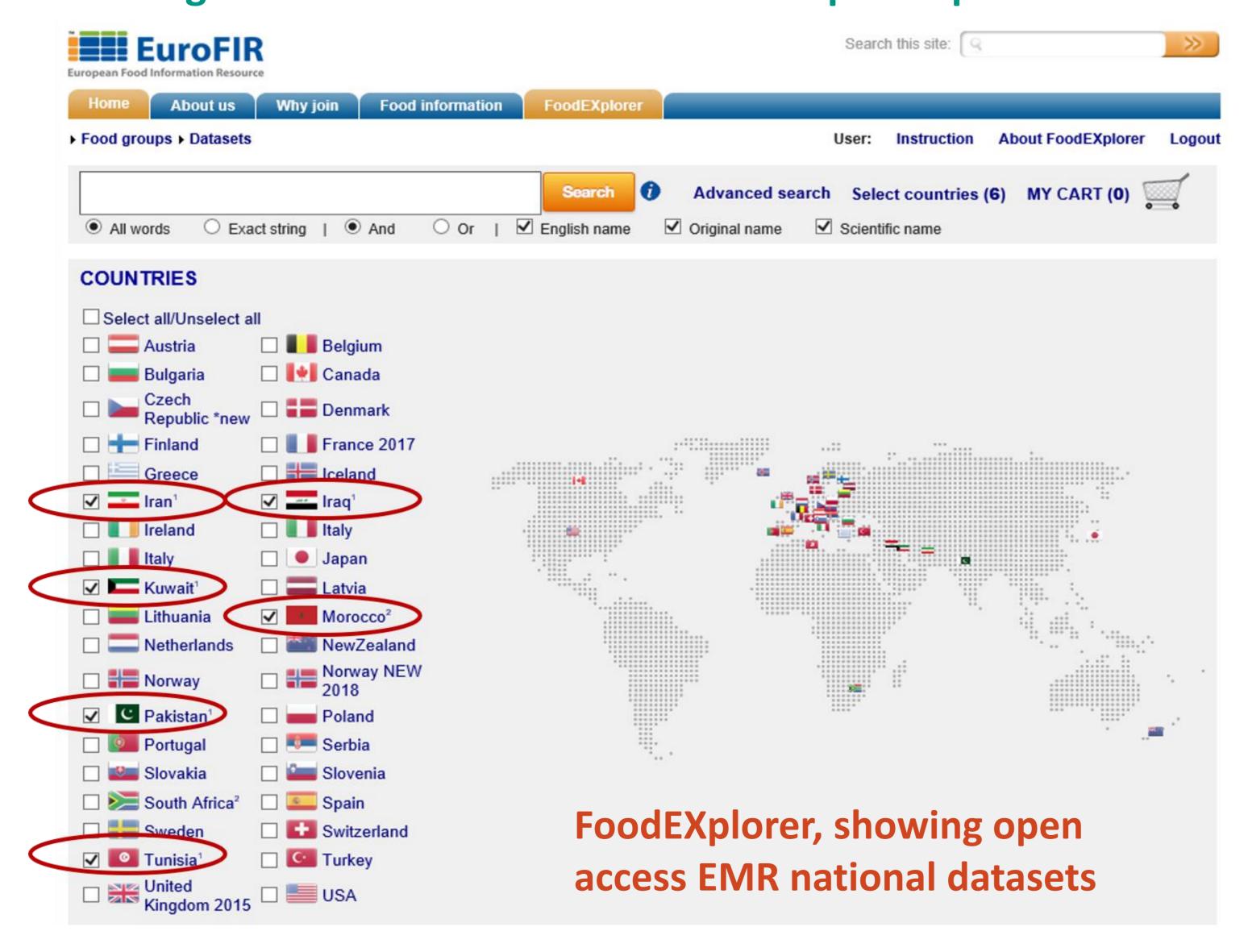
Background

- 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- Food Composition Data (FCD) in the countries of the Eastern Mediterranean regions (EMR) is often missing, incomplete, outdated or unreliable, particularly for fat, sugar and salt of processed foods.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.



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;
 - 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.

For further information contact paul.finglas@quadram.ac.uk

This project, supported by Global Challenges Research Funds (UK) and Medical Research Council (MR/R019576/1), is grateful to WHO-EMRO, food composition data compilers and all participants from EMR and West African countries for their contribution to this work.