ICFC 2017
International Conference on Food Contaminants

PortFIR and PT.ON.DATA

Integration of Portuguese Resources on Food Contaminants Domain

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REPÚBLICA PORTUGUESA
SAÚDE

SNS SERVIÇO NACIONAL DE SAÚDE

Instituto_Nacional de Saúde
Doutor Ricardo Jorge

PortFIR – Portuguese Food Information Resource

Programme of implementation of Portuguese excellence networks in food safety and nutrition

Food Information Portal

Sustainable Databases

Food composition

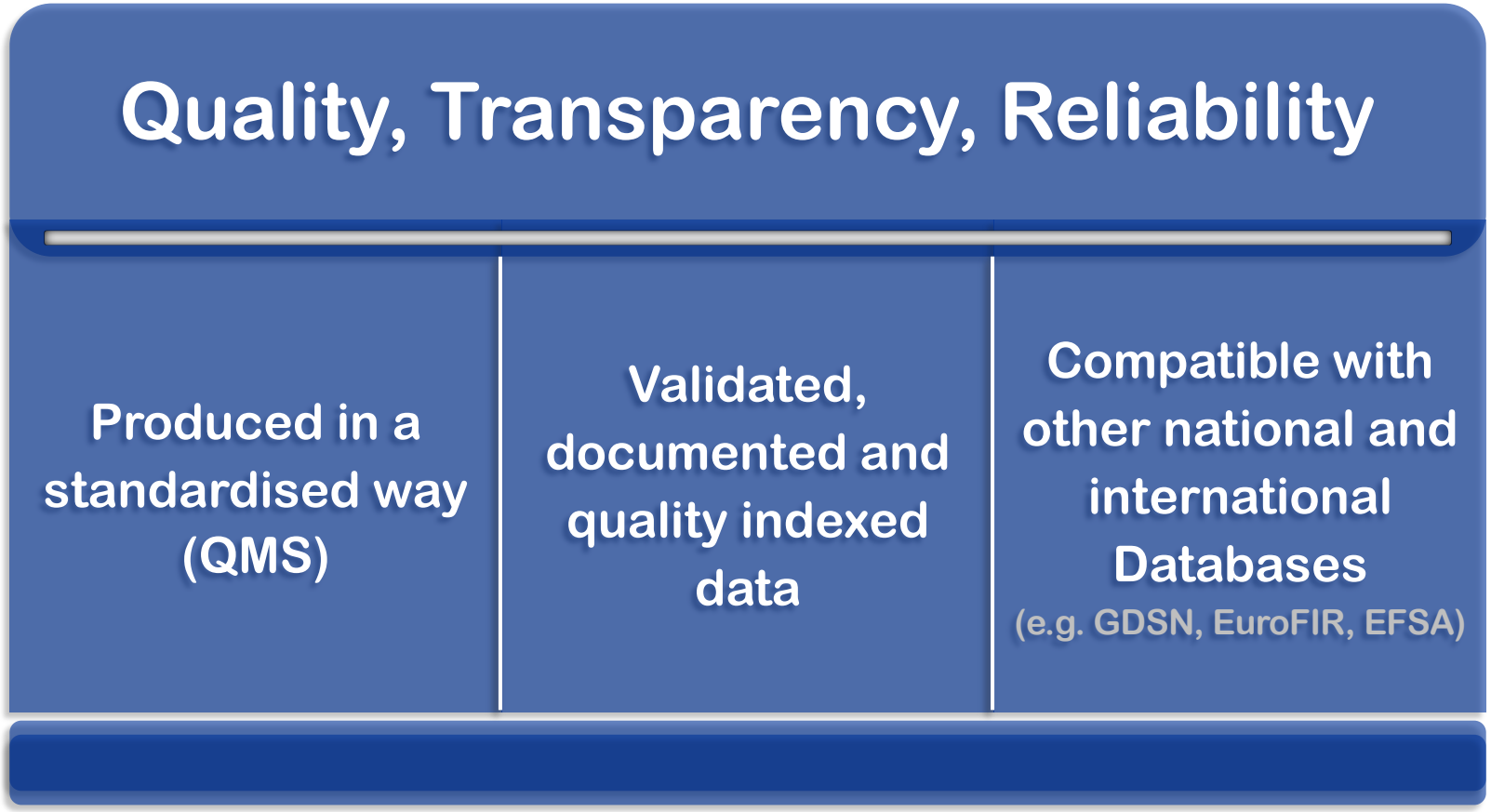
Food contamination

Food consumption

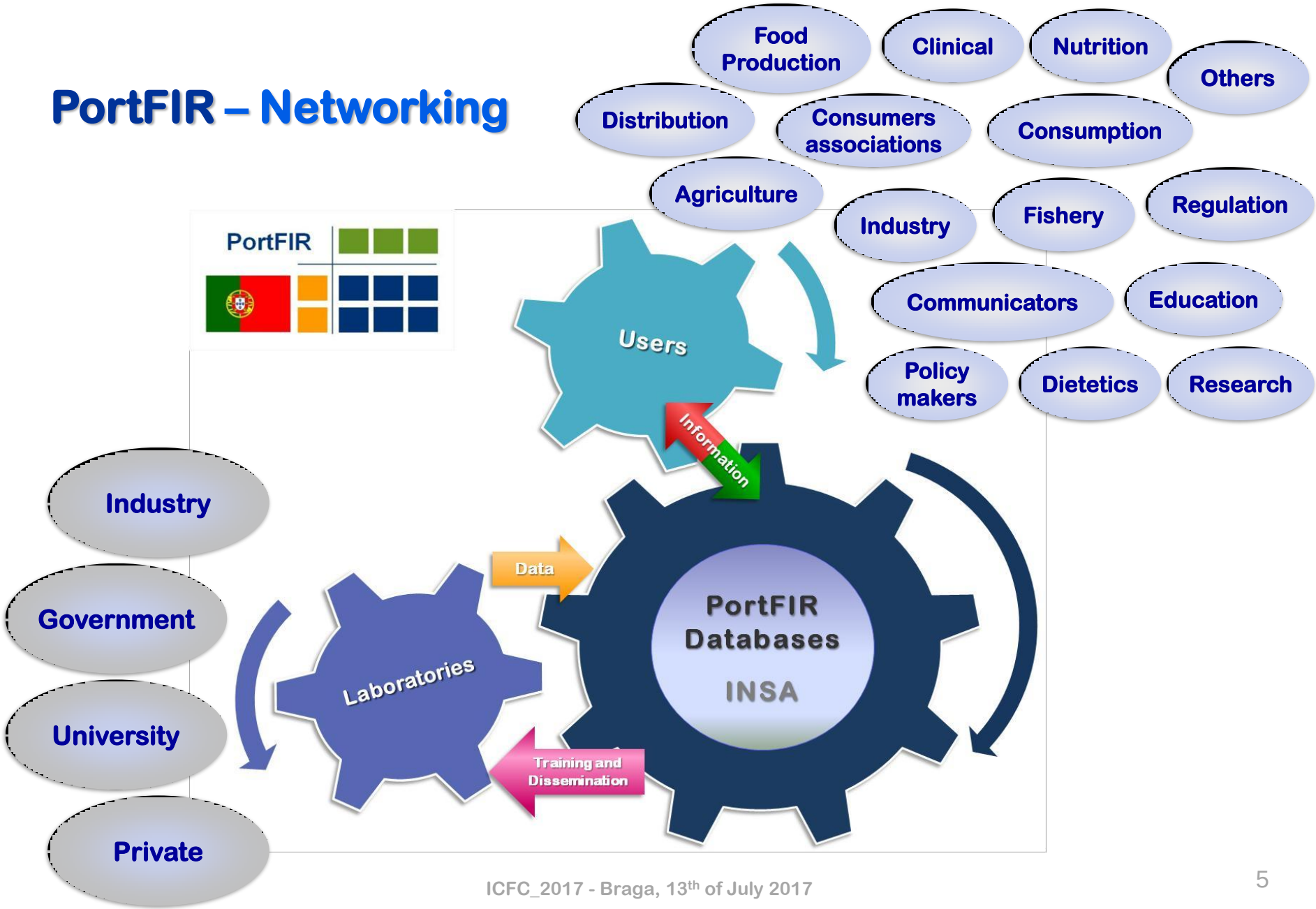
PortFIR – History

- Created in 2008;
- Coordinated by the National Institute of Health Doctor Ricardo Jorge (INSA) in partnership with GS1 Portugal;
- Collaboration of governmental and private organizations and companies of multiple sectors;
- Need/opportunity to integrate at national level food information data from multi-origins (e.g.: governmental risk management authorities, universities, research centres, laboratories and food business operators).

PortFIR – Databases



PortFIR – Networking

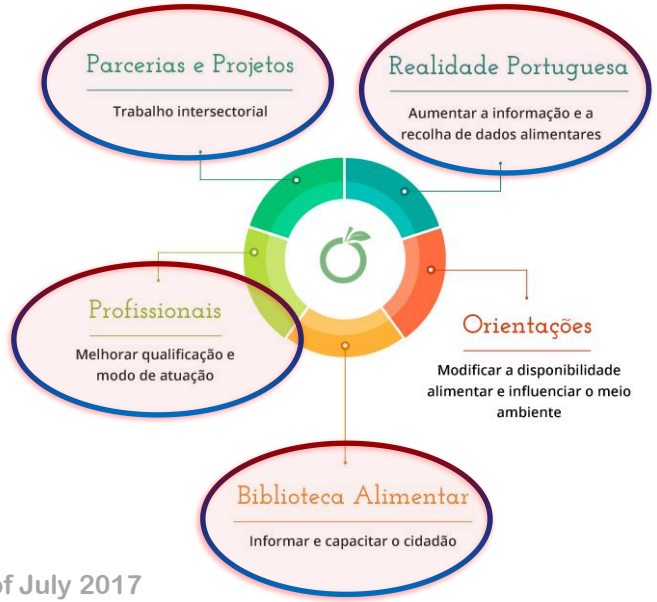


PortFIR – Food safety & Nutrition policy framework

- **Framing with Food Safety and Nutrition policies:**
  - **<u>At national level</u>:**
    - Directorate-General of Health (DGS) → **National Programme for the Promotion of Healthy Eating (PNPAS);**

SNS SERVIÇO NACIONAL DE SAÚDE | DGS desde 1899 Direção-Geral da Saúde | Programa Nacional para a Promoção da Alimentação Saudável

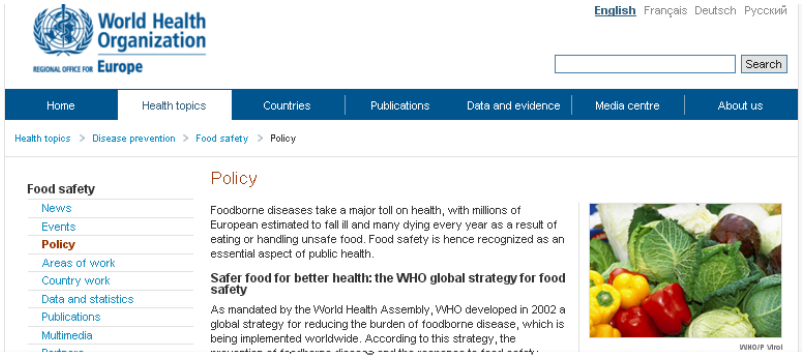
PNPAS proposes a set of goals distributed in five major areas:



PortFIR – Food safety & Nutrition policy framework

- **Framing with Food Safety and Nutrition policies:**
  - **<u>At an international level</u> :**
    - European Food Safety Authority (EFSA);
    - European Centre for Disease Prevention and Control (ECDC);
    - World Health Organization (WHO).

PortFIR – Food safety & Nutrition policy framework



Strategic plan for food safety including foodborne zoonoses 2013-2022

This Strategic Plan builds on World Health Assembly resolution WHA63.3 (May 2010) and provides a coherent framework for taking action on priority issues in the area of food safety and foodborne zoonoses for the period 2013–2022, and forms the basis of the WHO Twelfth General Programme of Work (2014-2019) for the program area food safety in Category 5.

The scope of the Plan covers food safety in all ramifications, encompassing the farm-to-table approach and including foodborne diseases of zoonotic origin. Therefore, all references to "food safety" or "foodborne diseases" comprise aspects or diseases of non-communicable and communicable origin, including foodborne zoonoses.

The Plan sets out three global strategic directions together with objectives and more detailed activities needed to achieve the overall mission:

- To lower the burden of foodborne disease, thereby strengthening the health security and ensuring sustainable development of Member States

The three strategic directions are as follows:

- Provide the science base for measures along the entire food-chain to decrease foodborne health risks
- Improve international and national cross-sectoral collaboration, enhance communication and advocacy
- Provide leadership and assist in the development and strengthening of risk-based, integrated national systems for food safety

PortFIR – Current Networks of Knowledge in Food Safety and Nutrition

2008 — Food Composition (RPCA)

2010 — Food Microbiological Information (RPIMA)

2016 — Food Chemical Contamination (RPCQA)

Working Groups:

Active

- Users
- Microbiological Occurrence in the Food Chain
- Effective Communication in Food
- Information Management *(NEW - 2017)*

Suspended

- Sampling
- Food Portions
- Foodborne Diseases
- Support Standardization Work
- Information Organisation and Transfer

PortFIR – Members

- About 140 members of approximately 90 public and private entities:
  - State laboratories;
  - Universities;
  - Research centres;
  - Health authorities;
  - Inspection authorities;
  - Legislators & regulators;
  - Private Enterprises;
  - Agro-food sector organisations.

PortFIR – Types of activities

Infrastructures building:

- **New thematic networks for knowledge sharing;**
- **New working groups;**
- **IT platform:**
  - Information management system (FoodCASE®) - **Food Composition Database (FCDB);**
  - Website;
  - Web services (EuroFIR, EFSA, …);

Routine activities;

- **Knowledge sharing** - working group meetings, preparation of guidance documents and reports;
- **Food information management** - collection, collation, standardisation and validation of data from different data sources within the country;
- **Data analysis and dissemination** - PortFIR *website*, other means.

PortFIR – Types of activities

- **Dissemination activities;**

  - **Presentation and /or dissemination of contents allusive to the PortFIR:**
    - Articles; posters and oral presentations;
    - Organization of events specifically designed for the purpose (*e.g.:* ***PortFIR Annual Meeting***);
    - Organization /participation in seminars, workshops, etc. with themes covered by PortFIR.

Pre-registration:
http://portfir.insa.pt

10th PortFIR Annual Meeting

27 October 2017 – INSA, Lisbon

Food Information

Building bridges for health observation

PortFIR – Working Groups (WG) relevant activities

WG Users

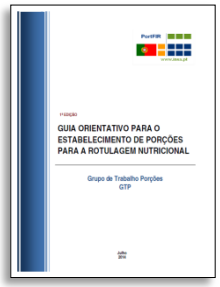
- → Assessment of food composition table users satisfaction and needs (2011)
- → Assessment of users of microbiological information in the food chain needs (2013)
- → Assessment of food composition table users needs - **Report October 2017**

WG Foodborne Diseases

- → Epidemiologic investigation of foodborne outbreaks in pharmacies (2014)

WG Food Portions

- → Guidance for the establishment of portions for nutrition labeling (2014)



WG Microbiological Occurrence in the Food Chain

- → Guidance for the establishment of microbiological criteria in food (2017)

PortFIR – WG "Information Management" *(NEW!)*

Food Chemical Contamination Network (RPCQA)

Framework:

The collection of analytical data on chemical contaminants in the food chain and their study are **essential components of risk assessment,** generating information that can serve as a basis for **assessing the benefit-risk associated with food** and for **defining recommendations** that contribute to **continuous improvement of food safety** and to **enable consumers to make healthier choices.**

Scope:

- Systematization of national information needs in the area of chemical contamination of food;
- Identification of the respective sources of information;
- Proposal of models for its sustainable management;
- Analysis of information and production of reports.

PortFIR – WG "Information Management" *(NEW!)*

Food Chemical Contamination Network (RPCQA)

Objectives:

- Assessment / Identification of existing information and priority needs:
  - Information gaps;
  - Harmonization of data between different sources;
  - Interconnections and resource optimization potential.
- Proposal the necessary database, respective models and needs, associated costs and sustainability plans;
- Collection, compilation and harmonization of data;
- Definition of indicators, data analysis and production of information and reports;

Coordenation:

- General Directorate of Food and Veterinary Affairs (DGAV) – Patrícia Inácio
- National Institute of Health Doctor Ricardo Jorge (INSA) – Roberto Brazão

PortFIR – WG "Information Management" *(NEW!)*

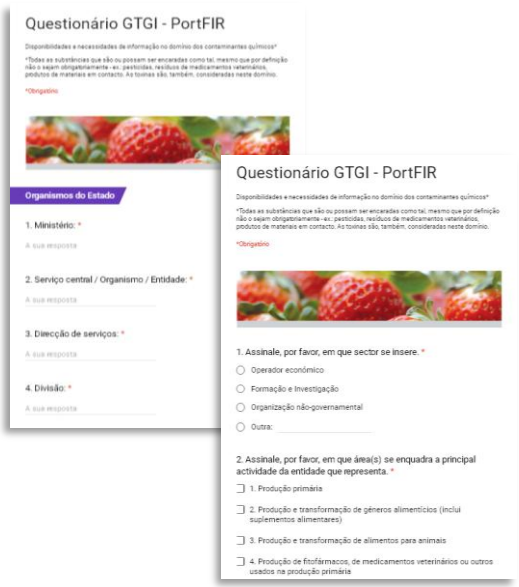
Food Chemical Contamination Network (RPCQA)

Availability and information needs assessment

Currently developing two questionnaires to be applied (20 Jul – 20 Set) to:

I. Food industry operators / Private laboratories / Research centers / Universities;

II. Governmental authorities / State laboratories.

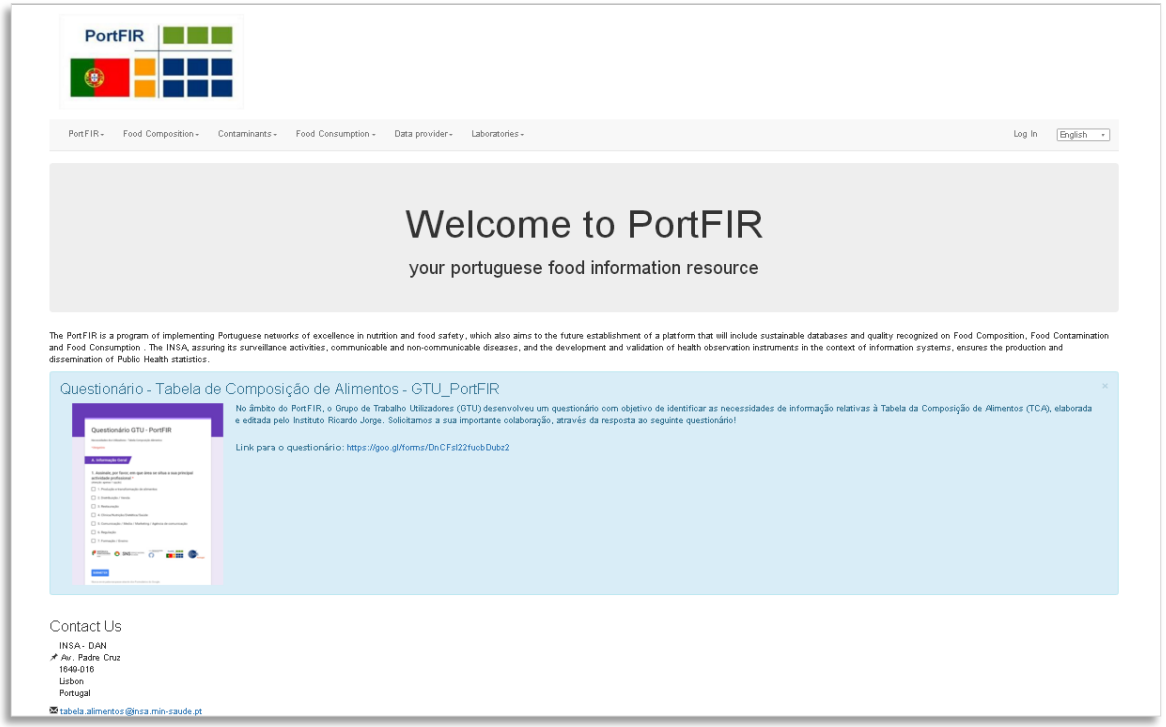


Report: October 2017

PortFIR – *Website*

- **More information and/or registration on the Working Groups**

http://portfir.insa.pt



PortFIR & PT.ON.DATA - Integration of Resources

- National Data Management System (NDMS) "alimentos PT•ON•DATA"

alimentos PT•ON•DATA
Dados Analíticos do Controlo Oficial de Alimentos

Major information / data provider *

**(future)*

Food contamination database

Contains **all the national data from the food and feed chain official control plans, between 2009 and 2015,** in the fields of:

- Chemical contaminants;
- Pesticide residues;
- Food additives;
- Biological monitoring;
- Residues of veterinary medicinal products;

Food Chemical Contamination Network (RPCQA)

PortFIR

"Alimentos PT.ON.DATA" – Creation

- Created in the frame of **electronic transmission of harmonized data collection of analytical results to EFSA**;

- Created and developed/adapted under the projects to implement the **Standard Sample Description** models - **SSD** and **SSD2** (**EFSA mandatory standards for the transmission of chemical occurrence data**);
  - Implementation of **SSD** → 2011 - 2013;
  - Implementation of **SSD2** → 2013 - **2018**.

- Created and developed/adapted by the **consortium INSA / DGAV** with collaboration of other National Authorities and Laboratories:
  - Economic and Food Safety Authority (ASAE);
  - Portuguese Institute for Sea and Atmosphere (IPMA);
  - National Institute for Agrarian and Veterinarian Research (INIAV)

"Alimentos PT.ON.DATA" – Creation

- Flowchart of the information circuit of the food and feed chain official control plans on contaminants:

"Alimentos PT.ON.DATA" – Framework

- Member States have the responsibility to transmit to EFSA all the data produced in the context of the **official control of food and feed chain**;

EFSA collects, compiles and analyzes all the information obtained from Members States to:

- **Undertake exposure and risk assessment related to food consumption;**

and

- **Promote activities aimed to its minimization**, namely: emission of scientific opinions and elaboration of technical and scientific support to European Community policies.

- Member States used to send data in the most varied formats and supports, compromising their use and making treatment and comparability difficult;

EFSA developed the SSD data models to harmonize the "communication" with the Member States in several data domains.

The SSD models define standardized data fields, controlled vocabularies, specific formats and validation rules, mandatory for all samples and analytical results, in the data transmission by Member States to EFSA

"Alimentos PT.ON.DATA" – Current status / Use / Access

- **Is under development.** It is expected to be full implemented in 2018;

- **Contains approximately 65.709 records** in SSD and **190.055 records** in SSD2 format, from the food and feed chain official control plans, between **2009 and 2015**, reported to EFSA:
  - **Chemical contaminants = 64.409 + 7.816** (2009 – 2015) – SSD and SSD2
  - **Pesticide residues = 112.224** (2014) – SSD2
  - **Food additives = 1300 + 709** (2012 – 2015) – SSD and SSD2
  - **Biological monitoring = 39.170** (2013 – 2015) – SSD2
  - **Residues of veterinary medicinal products = 30.136** (2015) – SSD2

  ***Data from 2016 will be reported until 01 October 2017**

- Has functionalities to upload, map, validate and transform to SSD the analytical data and also to create the XML (*Extensible Markup Language*) files, to be reported to EFSA in the DCF (Data Collection Framework);

"Alimentos PT.ON.DATA" – Current status / Use / Access

- Allows the **filling of the sample collection forms directly in the system** (The forms have been harmonized and adapted to the different authorities, to include all the sample information essential for the reporting of data according to the requirements of EFSA);
- Enables authorities **to monitor in real time the sampling and execution of the control plans** ;
- Allows **to perform data statistics and to extract data to do reports**;
- Due to the confidential nature of some information uploaded, **the system can only be accessed and used by authorized members** of the participant entities (**members have different levels of access to the information**);
- Due to EU **principles of transparency**, and despite the confidential nature, **some data contained in the PT.ON.DATA can be shared if asked** (certain fields will remain confidential);

"Alimentos PT.ON.DATA" – Benefits

- The creation and development/adaptation of the NMDS **"Alimentos PT.ON.DATA"** allowed to:
  - Concentrate and harmonize in a single database the results on the occurrence of contaminants in food and feed produced by the various competent authorities;
  - Elevate the level of automated processes and consequently an easier and faster data uploading, mapping, evaluation and transmission of the information to EFSA;
  - Improve the final quality, integrity and consistency of the data produced;

Contributes to the optimization of the official control plans and food chemical and microbiological risk assessment, aiming the improvement of food and feed safety.

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Thank you for your attention!