UPDATING THE PORTUGUESE FOOD COMPOSITION TABLE

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Introduction: Food composition databases are essential for various stakeholders and purposes, namely: nutritional epidemiology, nutrient intake assessment, diets planning, training, literacy, food products formulation and recipes, and labeling.

Harmonization and data compatibility has been promoted by EuroFIR (European Food Information Resource) at European level and internationally by INFOODS (International Network of Food Data Systems). The European Food Safety Authority (EFSA) leads in Europe the harmonization of food classification having developed and managed the FoodEx2 system.

The Portuguese Food Composition Table (TCA) had its first edition in 1961, presenting now 42 components/nutrients, and since 2017 has been hosted on PortFIR's website enabling several searches and download in Excel®.

Data compiled in TCA are preferably obtained by chemical analysis of food samples, representative of food as consumed by the population. However, due to the very high amount of food samples and components to be analyzed and the lack of funding to accomplish these activities, some values are generated based on other sources and calculations.

Aims: Continuous development, updating and dissemination of food nutritional composition database to respond to stakeholders needs.

Methods: Food component values were generated according to EuroFIR's compilation rules to assure international comparability, traceability and data quality.

New foods were compiled using analytical data, when available. Other data sources were: recipe calculations performed from the ingredients nutrient content, corrected for preparation factors (yields and nutrient retention factors); generation of nutrient values from analogous foods, which included adjusting micronutrient content to macronutrient levels.

Existing foods were reviewed regarding description, serving size, edible portion, market permanence and content of components.

FoodCASE® software was used to manage all food data, namely to document all values.

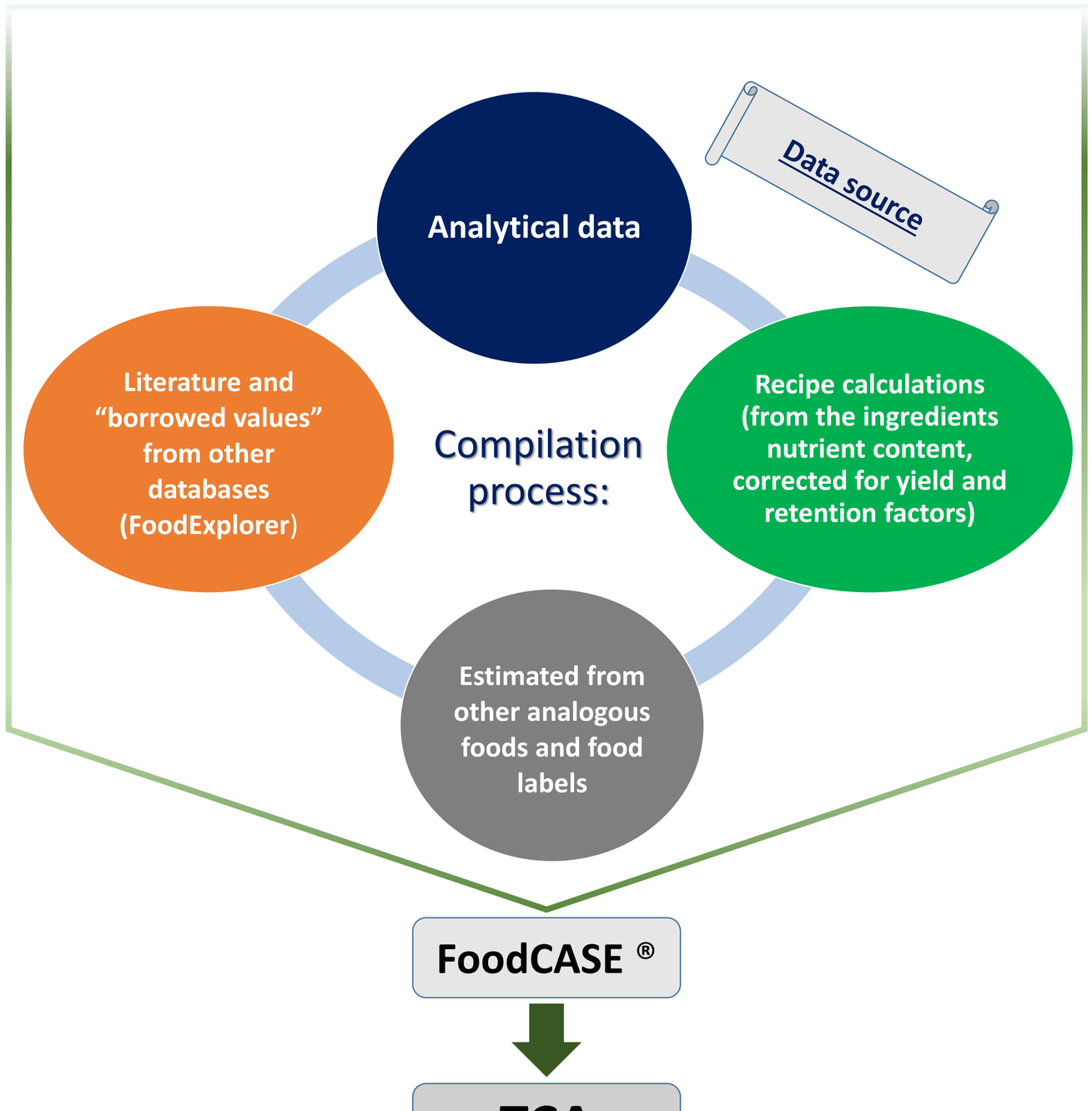

Figure 1 –Diagram of information sources and software for updating the TCA.

Results: The 2017 version included 1109 foods and information on the content of 42 components/nutrients. From 2018 to 2021, the three released versions, showed an increase of: 37, 129 and 32 new foods, and classification by FoodEX2 system up to 3rd level (group and subgroups).

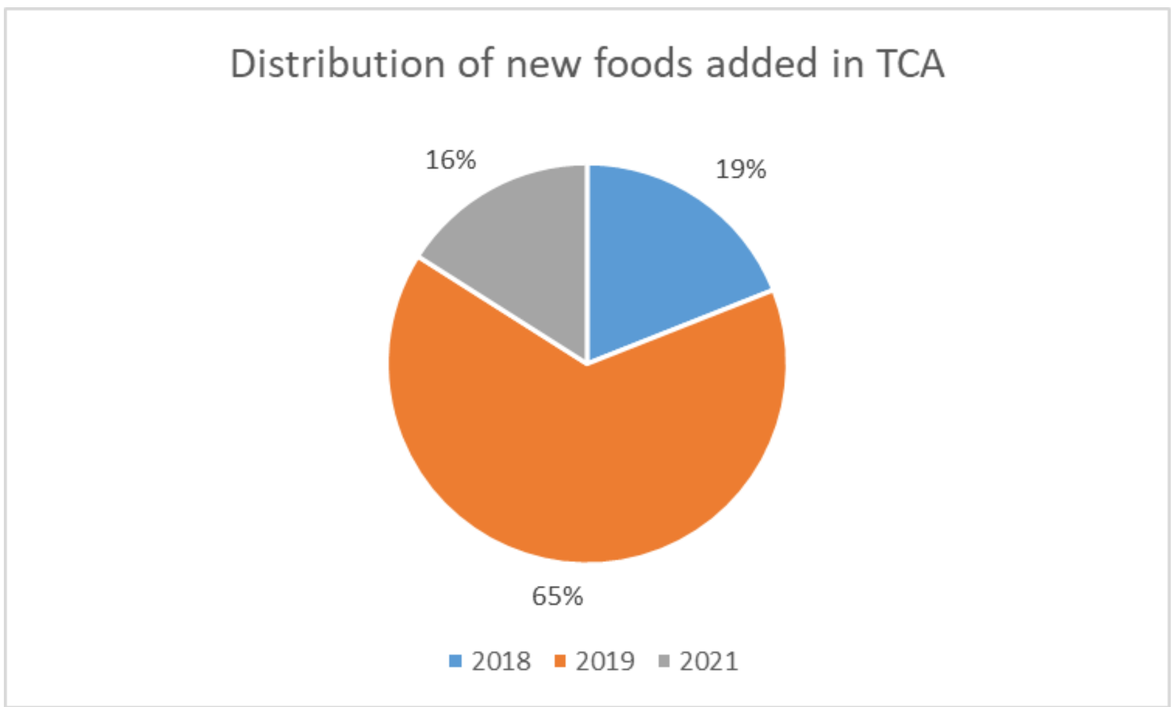

Figure 2 – New foods added in TCA, from 2018-2021.

Since 2019, new foods were essentially identified according to the National Food and Physical Activity Survey (2015-2016), highlighting those consumed by the respondents declaring to follow a vegetarian consumption pattern.

Meanwhile, **11153** changes were performed including food description/elimination, addition of edible portions and value updates. For the next edition, two new components, iodine and selenium were already compiled.

Conclusions: Updating the TCA is a complex, time-consuming and permanent task, carried out by INSA in accordance with internationally harmonized procedures, resorting to FoodCASE® software. Seeking to respond to user needs, it is important to define priority foods and nutrients to update and compile, based on food surveys and new trends of consumption.

Data are available on PortFIR´s and EuroFIR´s websites.

Dedicated funding is needed to foster the update of TCA with analytical programmes on new foods and components and maintenance of FoodCASE and PortFIR website.