FOOD INGREDIENTS AND PACKAGING UNIT

Call for Data

14th Call

Input data for the Exposure Assessment of Food Enzymes

Published: 02/12/2021

Deadline: 02/03/2022

New Deadline: 18/03/2022

Food process

- Manufacture of Indigestible Oligosaccharides

This call considers the production of indigestible oligosaccharides, also known as non-digestible oligosaccharides or fermentable fiber. The definition of this type of oligosaccharides or fibre is not yet well defined, known examples include fructo-oligosaccharides (FOS) and gluco-oligosaccharides (GOS). More such type of oligosaccarhides are continuously being discovered with the help of enzymes.

The term 'indigestible oligosaccharides' is not found in food labels, FOS and GOS are poorly labelled and could not be identified in the EFSA Raw Primary Commodity (RPC) model[1]. Therefore, the selection of food groups was aided by information from literatures and in the Mintel's Global New Products Database (http://www.mintel.com/global-new-products-database). The key word "fructo-oligosaccharides", "galacto-oligosaccharides", "inulin", "dietary fiber" and their variants were used in the search. In addition, the selection of food categories was also assisted by the information provided in food enzyme applications.

Instruction for completing the attached MS Excel ® file

Sheet 1 contains a legend for the information given in Sheet 2.

EFSA is seeking your feedback on the information listed in the Excel file concerning the FoodEx categories (column B), and the associated technical factors for Indigestible Oligosaccharides Production (columns D-F).

1. For FoodEx categories (column B), should any food group be excluded? Or are there any food groups missing from the list?

[1] EFSA (European Food Safety Authority), Dujardin B and Kirwan L, 2019. Technical report on the raw primary commodity (RPC) model: strengthening EFSA's capacity to assess dietary exposure at different levels of the food chain, from raw primary commodities to foods as consumed. EFSA supporting publication 2019:EN-1532. 30pp. doi:10.2903/sp.efsa.2019.EN-1532

In column H, please indicate 'Remove' for food groups to be excluded, and list any additionally proposed food groups with the corresponding FoodEx category at the end of this column.

2. Your attention is drawn also to one additional questions at the bottom of sheet 2.

The FoodEx categories are available in the FoodEx list (Sheet 3).

3. In columns D-F, the average technical conversion factor (f1) and the average recipe fractions (f2) and the percentage of FoodEx category containing Indigestible Oligosaccharides (f3).

Average technical conversion factor (f1) was calculated by assuming that 2 kg of disaccharide (lactose or sucrose) are needed to synthesise 1 kg of Indigestible Oligosaccharide (GOS or FOS). Feedback is sought on this value.

> Indigestible oligosaccharides could also be obtained by the hydrolysis of polysaccharides like Inulin, which would lead to a different f1 factor. As synthesis is the way to obtain GOS or FOS in all the food enzyme applications, EFSA did not consider a f1 factor for hydrolysis reactions.

Factors f2=0.8 for Infant Formulae and Follow-on Formulae is taken from the Regulation (EU) 2016/127.

Factors f2 and f3 for other foods are derived from information available in the Mintel's Global New Products Database by using the keyword "dietary fiber" as searching criteria. EFSA is aware that this keyword leads to overestimation. However, the use of specific keywords ("GOS", "FOS", "Inulin") would certainly led to underestimation.

If you do not agree with any one of the listed technical factors, keeping in mind that there can be some variation between foods in each category, please propose an alternative average factor for the respective FoodEx category in columns I-K.

For transparency purposes, please provide a short text using columns L-O to justify any feedback given. Any references should be provided in the last column.

Submission of data

Data should be submitted directly to EFSA using the dedicated e-mail address for this service: fip@efsa.europa.eu. This mailbox is also the contact point for any technical support/advice you need for the reporting of this data.

End