

Information Session, 18 April 2023



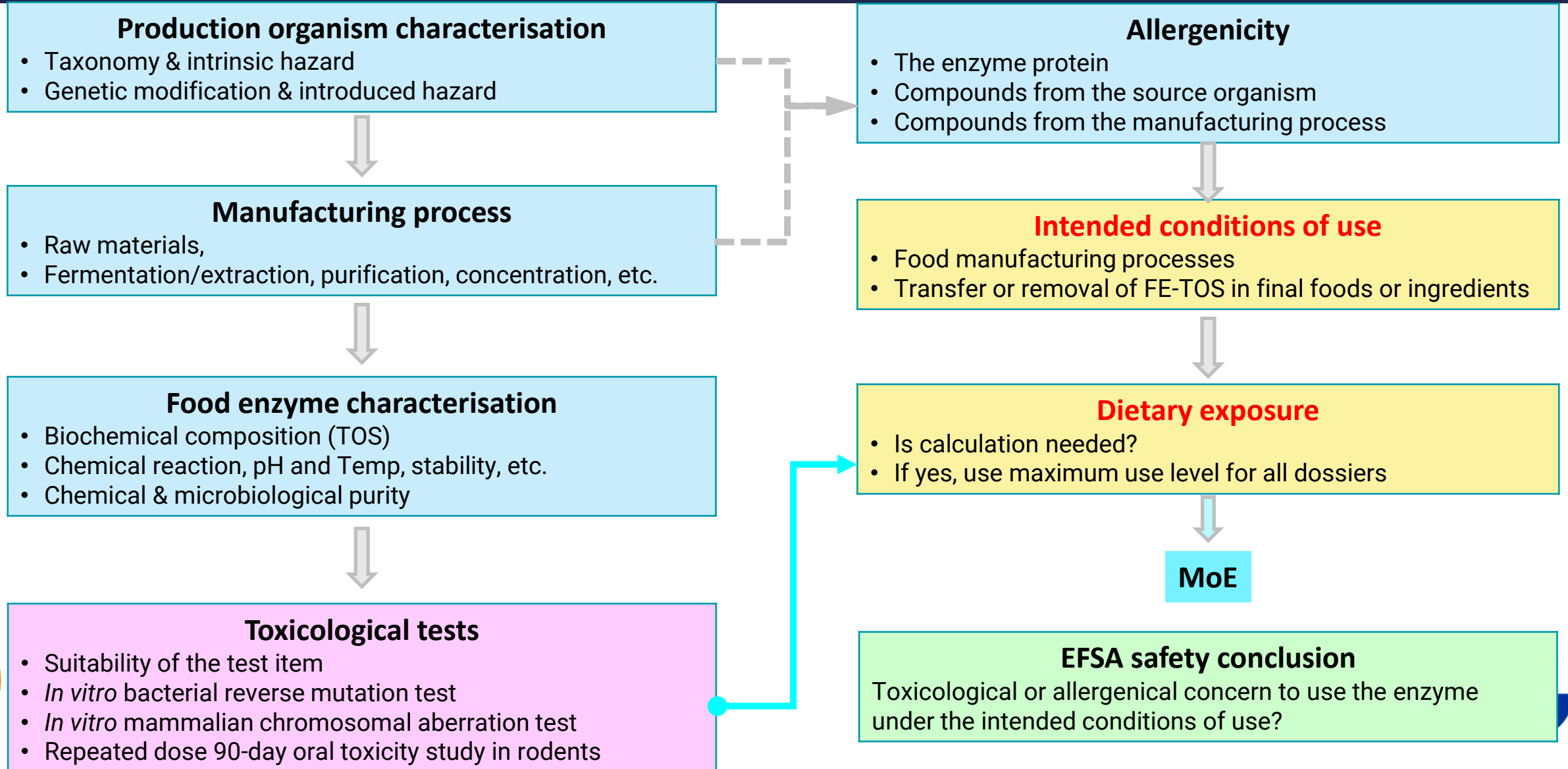
INPUT DATA FOR FOOD ENZYME INTAKE MODEL

ENZYMES IN FOOD PRODUCTION

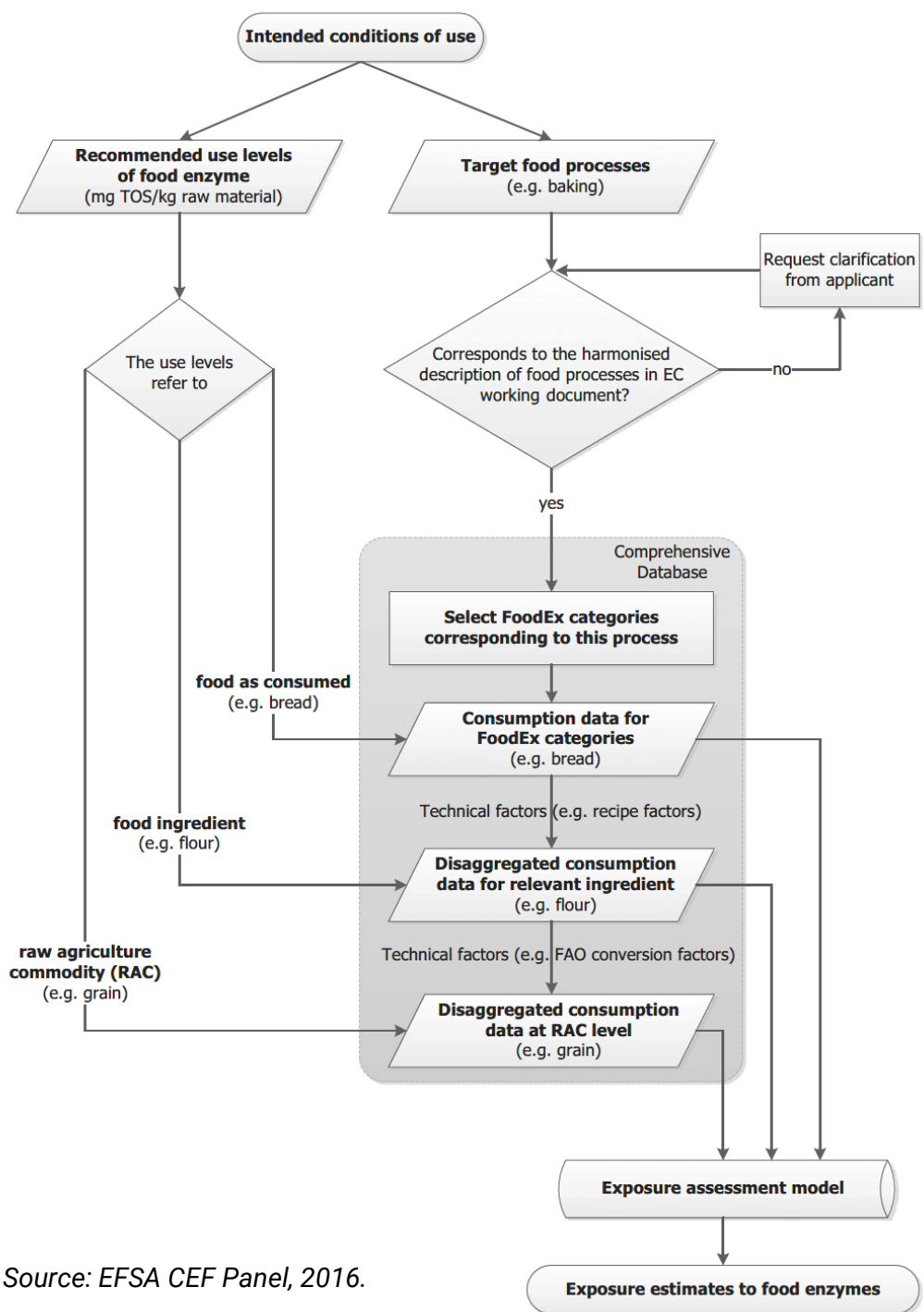
- ❑ An ancient story started with ingredients containing enzymes.
 - Yeast – Wine, beer and bread
 - Abomasum of lactating ruminants – Cheese
- ❑ Long time practice to extract the biocatalysts for processing raw materials.
 - Amylase, cellulase, lactase, pectinase, proteases, lipases, invertase, isomerase, oxidase, polymerase, nuclease, etc.
 - Considered as a type of food additives by WHO/FAO still today and in the EU until Reg. (EC) 1332/2008.
- ❑ Expansion of food enzymes in food production in the past 40 years
 - Driven by advancement in protein technology and increasing demand for processed foods
 - EFSA centralises the safety assessment of food enzymes to European consumers.



FOOD ENZYME SAFETY ASSESSMENT PARADIGM



FOOD ENZYME EXPOSURE ASSESSMENT APPROACH



Actual consumption data-based approach, specific to the intended uses

Permits “drill down” (e.g. for refinement purposes)

- Transfer or removal of food enzyme residue in foods
- Inclusion or exclusion food groups
- Aggregation or disaggregation by needs

Input data:

- **Intended use** (prone to interpretation)
- Use level (given in dossiers)
- **Technical factors** (scattered)
- EFSA Comprehensive Consumption database (available)

Source: EFSA CEF Panel, 2016.

Simplified scheme for showing main steps only

INFO SESSION PROGRAM

9:00	Welcome	
9:10	Session 1 - Food manufacturing processes in which food enzymes are (or may be) applied	
	<ul style="list-style-type: none">▪ Categorization of the processes▪ Food manufacturing processes in the food enzyme Union list▪ AMFEP perspective	Prof. Holger Zorn Dr. Catherine Evrevin Dr. Mariella Kuilman
10:45 – 11:15 Coffee break		
11:15	Session 2 - Process-specific technical factors and double counting	
	<ul style="list-style-type: none">▪ Technical factors used in estimation▪ AMFEP concerns about double counting▪ Mitigation of double counting	Dr. Yi Liu Dr. Dorthe Helnov Dr. Daniele Cavanna & Dr. Giulio di Piazza
12:45 – 14:00 Lunch break		
14:00	Session 3 – FEIM tools	
	<ul style="list-style-type: none">▪ Single process calculators▪ Translation from FoodEx1 to FoodEx2▪ Development of the web tool	Dr. Rita Ferreira de Sousa Dr. Francesco Pesce & Dr. Kyriaki Apergi Dr. Giulio di Piazza
15:30 – 16:00 Tea break		
16:00	Panel discussion 1 – Food manufacturing processes	
16:40	Panel discussion 2 – FEIM	
17:20	Concluding remarks	