# Food Additive Intake Model (FAIM) template 2.0

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Inputting data using the additive usage template & an introduction to the Food Additive Intake Model (FAIM)

Parma, 5<sup>th</sup> September 2018





# **OVERALL OBJECTIVE OF THE FAIM TEMPLATE**

• Objective:

screening tool for the assessment of chronic dietary exposure to:

- new food additives, or
- new uses of already authorised food additives.
- End users:
  - applicants,
  - risk assessors, and
  - risk managers.





## FOOD ADDITIVES INTAKE MODEL (FAIM) 2.0

MicroStrategy | 10

It is based on raw individual food consumption data from different population groups and European countries, directly from the EFSA data warehouse.

EDITIORIAL_EPSA Data Analysis Library (EPSA) - Consumption Deprecated > Shared Reports > Test > FAIM Hodel				≡
DEFINITION				
Herbs, spices, seasonings (Not Specified)	12.2	0.000000	0.000000	
Vinegars	12.3	0.000000	0.000000	
Mustard	12.4	0.000000	0.000000	
Soups and broths	12.5	0.000000	0.000000	Su
Sauces	12.6	0.000000	0.000000	
Salads and savoury based sandwich spreads	12.7	0.000000	0.000000	
Yeast and yeast products	12.8	0.000000	0.000000	
Protein products, excluding products covered in category 1.8	12.9	0.000000	0.000000	
Foods for infants and young children (Not Specified)	13.1	0.000000	0.000000	Di
Dietary foods for special medical purposes defined in Directive 1999/21/EC (excluding products from food category 13.1.5)	13.2	0.000000	0.000000	
Dietary foods for weight control diets intended to replace total daily food intake or an individual meal (the whole or part of the total daily diet)	13.3	0.000000	0.000000	
Foods suitable for people intolerant to gluten as defined by Regulation (EC) No 41/2009	13.4	0.000000	0.000000	
Water, including natural mineral water as defined in Directive 2009/54/EC and spring water and all other bottled or packed waters	14.1.1	0.000000	0.000000	
Fruit juices as defined by Directive 2001/112/EC	14.1.2.1	0.000000	15.000000	
Vegetable juices	14.1.2.2	0.000000	0.000000	
Fruit nectars as defined by Directive 2001/112/EC and vegetable nectars and similar products	14.1.3	0.000000	0.000000	
Flavoured drinks	14.1.4	0.000000	0.000000	
Flavoured drinks with sugar	14.1.4.1	0.000000	0.000000	
Flavoured drinks with sweetener	14.1.4.2	0.000000	0.000000	
Coffee, tea, herbal and fruit infusions, chicory; tea, herbal and fruit infusions and chicory extracts; tea, plant, fruit and cereal preparations for infusions, as well as mixes and instant mixes of these products (Not Specified)	14.1.5	0.000000	0.000000	
Beer and malt beverages	14.2.1	0.000000	0.000000	
Wine and other products defined by Regulation (EC) No 1224/2007, and alphabel free counterparts	14.2.2	0.000000	0.000000	

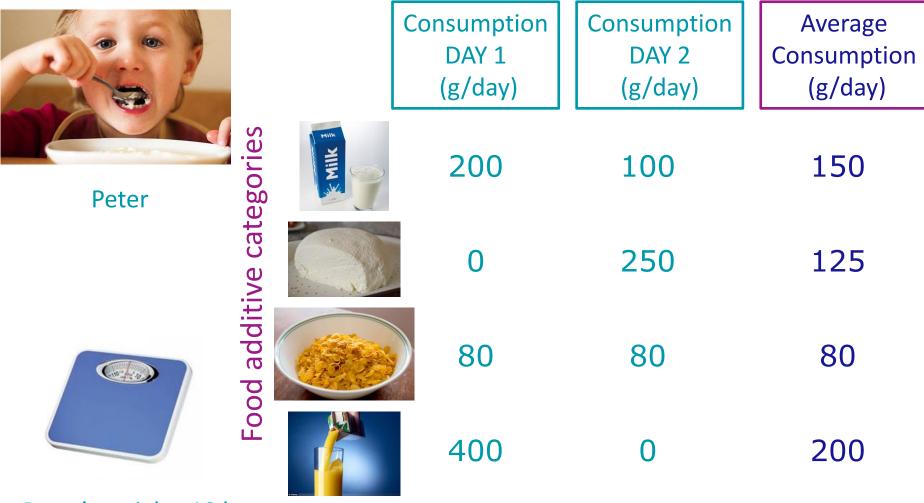


### **EXAMPLE - ADDITIVE LEVELS**

	Additive level (mg/kg)	Food additive categories			
MIIK	8	1.1	Unflavoured pasteurised and sterilised (including UHT) milk		
	5	01.7.4	Whey cheese		
	21	6.3	Breakfast cereals		
	15	14.1.2.1	Fruit juices as defined by Directive 2001/112/EC		



### DIETARY EXPOSURE ASSESSMENT USING INDIVIDUAL DATA



Peter's weight: 18 kg



### DIETARY EXPOSURE ASSESSMENT USING INDIVIDUAL DATA

S	Average consumption (g/day)	Additive level (mg/kg)	Chronic exposure (mg/day)		
Peter   Image: Contract of the second se	150	8	1.2		
litive ca	125	5	0.6		
bod add	80	21	1.7		
	200	15	3		
Peter's weight: 18 kg Total chronic exposure in mg per day: 6.5					
Total chronic exposure in mg/kg bw per day: 0.36					



### **DIETARY EXPOSURE DISTRIBUTION**



Mean exposure

μ

# Mean exposure contribution (%)



Unflavoured pasteurised and sterilised (including UHT) milk
 Unflavoured fermented milk products, heat-treated after fermentation
 Breakfast cereals

Fruit juices as defined by Directive 2001/112/EC and vegetable juices

High exposure (95<sup>th</sup> percentile)



# FOOD CONSUMPTION DATA USED BY FAIM 2.0

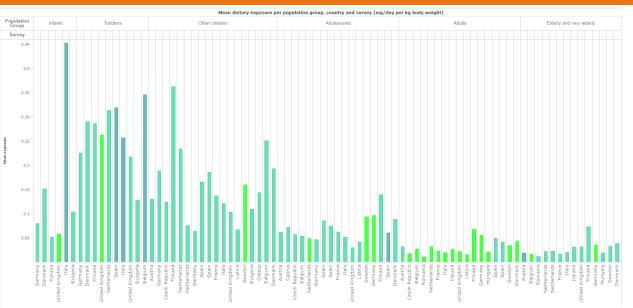
Number of	
Subjects	66,025
Consumption events	6,835,409

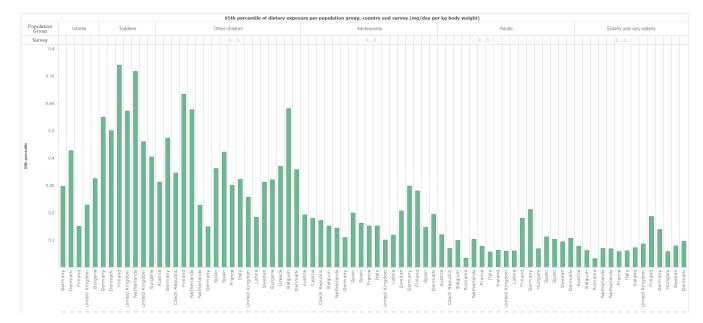
Age class	Age range	Number of surveys	Number of countries
Infants	3 – 12 months	6	6
Toddlers	1 – 3 years	10	9
Children	3 – 10 years	18	15
Adolescents	10 – 18 years	17	14
Adults	18 – 65 years	17	16
Elderly and very elderly	> 65 years	13	13

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### EXAMPLE: MEAN AND 95<sup>TH</sup> PERCENTILE OF EXPOSURE FROM FAIM



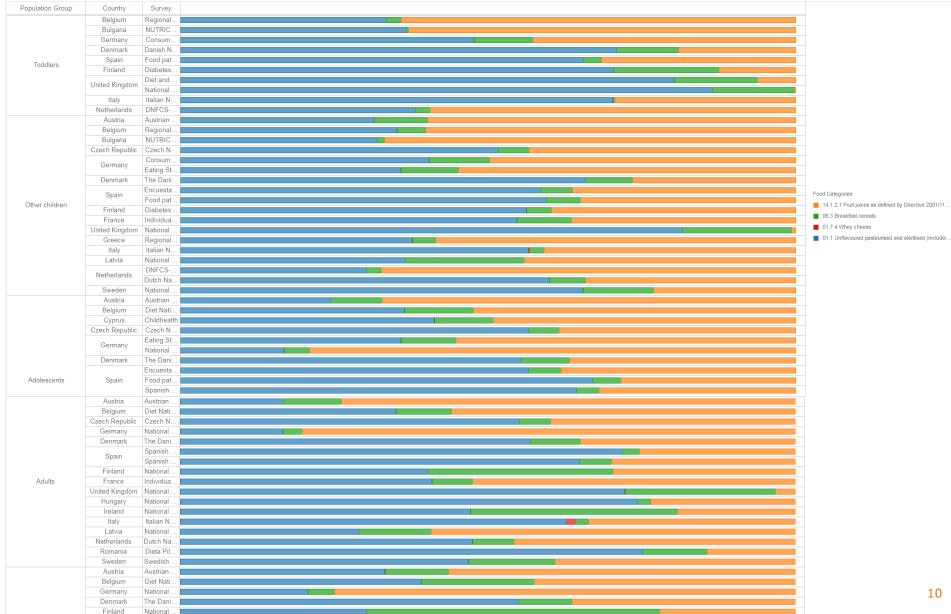




## **EXAMPLE: EXPOSURE SOURCES (%)**

Exposure sources (%) per population group, country and survey

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