

Healthy Food for a Healthy Europe

WP 5 - REFORMULATION AND PROCESSED FOOD MONITORING

Monitoring the food market for a healthy Europe

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Best-RemaP – Work Package 5 Reformulation and processed food monitoring







Implementation of Oqali at European level

Oqali (2008) :

France – all food categories

Janpa (2015-2017):

2 countries – 2 food categories

[Euremo (2019-2021):

16 countries – all food categories]

Best-ReMap (2020-2023):

18 countries (4+14) – 5 food categories

Work package Leaders & Team





Best-ReMaP JA



Co-funded by the Third Health Programme of the European Union



Direct benefits to European citizens

The activities of this Work Package will:

- Give an overview of the nutritional quality of the food
- Allow comparisons between countries
- Provide data to evaluate and adapt nutrition policies in Europe
- Identify best formulation to incite manufacturers to improve the nutritional quality of their products



Key information: nutritional quality monitoring / tool for nutrition policy / promoting reformulation





Best-ReMaP: main tasks of WP 5



Definition of the methodology:

- food category prioritization (June 21)
- new technologies and digital source of data evaluation (Mar 23)

Dissemination of the methodology:

- codification of pre-existing data (Sept 21)
- production of guidelines (June 21-Mar 23)

Implementation of a 1st snapshot (4 countries):

- data collection (*July 22*)
- data treatment (Nov 22)

Implementation of a 2nd snapshot (14 countries):

- data collection (Mar 23 batch 1 and July 23 batch 2)
- data treatment for some countries:
 - trend assessment (Apr 23)
 - impact on nutrient intakes (Aug 23)
 - comparisons between countries (Aug 23)



Target groups of Best-ReMaP

- □ **Policy makers:** to assess and decide nutrition policies
- □ Food producers: to benchmark their products and identify margin of reformulation
- □ Consumers: to have factual information on the evolution of the nutritional quality of the food offer

Best-ReMaP key methods (based on Janpa)

- □ Data collection: pictures taken in shops. Crowdsourcing and webscraping tested but not validated.
- Data codification in subcategories of products designed to monitor food reformulation by grouping products with similar sales name, manufacturing technology, recipe, or marketing positioning
 - Identification of margin of reformulation
 - Possible identification of best in class products
 - Possible comparison between countries
- Indicators defined for the follow up (analyse of the food offer, nutritional values, portion size)
- □ Common tools and programs

Examples of tools developed during Best-ReMaP

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Main fields collected

Labeled product description

- Bar code
- Legal name
- Commercial name
- Brand name
- Net weight + unit
- Number of units
- Portion size (+unit)
- Preservation method (ambient/chilled/frozen)
- Front of pack labeling
- Type of brand
- Brand owner

Labeled nutritionnal information

- Labeled nutritional content per 100g or 100ml
- Labeled nutritional content for the product as consumed (even if per serving size)

→ if not the case per 100g when relevant (mashed potatoes, dehydrated soups,...)

Ingredients list

- As labeled
- Including allergens

Pictures

- Front of pack
- All faces

Examples of tools developed during Best-ReMaP



Detailed methodology guides for the classification of products into sub-categories with definitions and concrete examples

WORK Package 5 - GUIDELINES FOR CLASSIFICATION

Crunchy chocolate muesli

Category code	Category	Subcategory code	Subcategory	Definition
1	Breakfast cereals	678	Crunchy chocolate muesli	Mixture of cereals (oat, wheat, rice, spelt, corn, buckwheat, etc.) in the form of crunchy clusters with chocolate and/or cocoa. May contain fruit and/or nuts. Example: Chocolate caramel muesli, Granola with figs and chocolate, Crunchy muesli with chocolate pieces and hazelnuts, etc.







Examples of tools developed during Best-ReMaP

Best-ReMaP

Healthy Food for a Healthy Future

WP 5 – REFORMULATION AND PROCESSED FOOD MONITORING

Guidelines for data treatment and analysis for a first snapshot (T0)

Anses

Detailed methodology guides for data treatment and analysis using statistical software

WORK Package 5 – Reformulation and processed food monitoring

Running of 'T0_indicators' program

T0_indicators.R* ×	Environment History Connections Tutorial
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1 ####### TO INDICATORS	Setting parameters of the TU_Indicators
3 #Version of R used : 4.1.2	
4 #Rstudio needs to be used for using the program in a simpler way : in	program
5 ###IMPORTANT : R software must be installed on your computer in order	
7 ##dplyr : 1.0.7	
8 ##tidyverse : 1.3.1	In the 'TO indicators' program, you need to change the name of the
9 ##ggplot : 3.3.5	in the roundedors program, you need to change the name of the
11 #Load the necessary packages each time you open Rstudio for running 1	country with your own country name in the input file (line 22) in
12 library("ggplot2")	the script of the program.
13 library("dplyr")	
14 Horary(croyverse) 15	
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19 19 19 19 19 19 19 19 19 19 19 19 19 1	alphabet as in the verification programs.
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22 Input_file= T0_data_collection_France_steps_cokkecieb.csv 23	example :
24 ##verification file (csv) name :	Input file =
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28 ##Indicate the separator used for saving your Excel file in csv (","	 (X) is the number of the last file exported and corrected after the
29 separator=":"	last rup of the second verification program)
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	→ There is no output file to set up here as the program outputs are
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1- What is the main interest to collect data at brand level at two different times ?

□ To follow reformulations

□ To stigmatize bad products

To have more data





1- What is the main interest to collect data at brand level at two different times ?

To follow reformulations

To stigmatize bad products

To have more data





2- Why classify products in specific subcategories?

- ☐ To help consumers choose their products
- □ To be able to identify margin of reformulation
- To stick to marketing classification





2- Why classify products in specific subcategories?



- To be able to identify margin of reformulation
- To stick to marketing classification





Best-ReMap - Work Package 5 Reformulation and processed food monitoring





Main outcomes of the WP5

Dissemination of the monitoring methodology

- Common Best-ReMaP subcategories
- List of 5 priority food categories
- Comprehensive guidelines written and tested by partner countries
- Common tools shared and tested (templates for data collection, programs for data entry verification and data treatment)
- Trainings on data collection / data codification / data treatment (for 19 countries)

Feeding the European JRC composition database at the branded product level

- Recodification of pre-existing data in Best-ReMaP subcategories
- Data collection for the 5 food categories prioritized (19 countries)
- First statistical analysis at branded level
- Creation of an open access database (gathering data collected during Best-ReMaP and pre-existing data) by JRC



First results



Prioritization of the food categories

List of 19 food categories main contributors in sugar, fat, saturated fat and salt

1

Consideration of pre-existing data

2

in the participating countries

Final list of 5 food categories :

Bread products

Delicatessen meats

Soft drinks

Breakfast cereals

Fresh dairy products and dessert

Validation by country partners

4

Room for reformulation ?

3





3- In your opinion, what is the biggest challenge faced by our partners during the project?

- □ Classify the data with the Best-ReMaP subcategories
- □ Analyse the data
- □ Take pictures of products in the shops





3- In your opinion, what is the biggest challenge faced by our partners during the project?







4- In your opinion, hat is the longest part of the work?

- Data collection
- □ Data entry and encoding
- Data treatment





4- In your opinion, what is the longest part of the work?

- Data collection
- Data entry and encoding
- Data treatment





5- What are the alternative methods to collecting photos in shop? (several answers possible)

- Webscrapping
- □ Crowdsourcing
- Use of GS1
- Food purchase





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Evaluation of alternative sources of information



- Over-representation of *Cereals without added sugar* and *Traditional muesli flakes* compared to Oqali
- Under-representation of Crunchy chocolate muesli, Chocolate-flavoured cereals and Honey/caramel cereals compared to Oqali
- Products available in Oqali but not in OFF are mostly **national brands**
- Products available in OFF but not in Oqali are mostly little known and organic brand
- \rightarrow <u>hypothesis</u>: bias of contributors to the OFF database?



Alternative sources of information: crowdsourcing

Overview of the nutritional values available in OFF and Oqali for the 2018 matched products (n=445)





Alternative sources of information: crowdsourcing

Summary of the comparison of the nutritional values that are different in OFF and Oqali for the 2018 matched products





Alternative sources of information: crowdsourcing (based on the analysis of Open Food Facts data)

- Strengths
- Freely available data available for several European countries
- Few missing data for nutrient content
- Limitations
 - Representativeness
 - Low for several countries except France (low number of products)
 - Food offer differs from pre-existing data
 - Difficulties to identify products present at a given time in a given country Reliability
 - Significant differences in the nutrient content at the subcategory level and at the product level

Conclusion

The OFF database could be very useful in supporting the monitoring of reformulation if

- Access to information that identifies which products are available on the market at a given time is facilitated
- The representativeness of most consumed products is improved
- The reliability of the collected information is increased for instance by higher verifications of data entry

Alternative sources of information: webscraping

- Strengths
- Not as burdensome as classical data collection
- Limitations
- Requires adapted tools/developments
- Not possible on all websites
- Food classification is very burdensome without automated programming
- Barcodes not available (useful to link products over time to identify reformulation)

Conclusion

It is possible to web scrape data from a retailer website but

- Without a dedicated tool, this method is complex and requires an experienced programmer
- Based on the studied websites, web scraping data is not comparable with the traditional method when assessing nutrients content at the category level which means that it is not a good source to use to follow food reformulation



Alternative sources of information: use of GS1 (case study)

Strengths

- Data provided directly from the manufacturers
- Data updated daily
- Limitations
- Coverage of the market very variable from one country to another
- Available information from GS1 not always accessible
- Data quality depending on manufactures/suppliers
- Differences in conditions and use of the data depending of the country
- Not covering the whole market (retailer brand and hard discount brands are not always available)
- Nomenclature used (Global Product Classification (GPC) system) not specific enough
- Data from GS1 cannot be published at the branded product level in an open access database (terms of use)

Conclusion:

GS1 is an interesting source of data because the data are directly provided and controlled by the industry but

- Representativeness varies from one country to another
- The reliability of the data has not been evaluated
- Data cannot be published at the brand level and are therefore not relevant to constitute the basis of an open access database



Number of products and analysis of the food offer



 \approx 20 000 products (Janpa included)

Data collection : 1st snapshot

(July 2021 to July 2022)



- → 4 countries, for which no branded data was available prior to Best-ReMaP (except for 2 categories in Ireland)
- → \approx 8000 products
- \rightarrow State of play (T0) of the food offer

Data collection : 2nd snapshot_Batch 1

(Mar. 2022 to Feb. 2023)

Second data collection: number of products collected during Best-Remap, by food category



- → 6 countries, for which branded data was available prior to Best-ReMaP
- → \approx 25000 products
- \rightarrow Possibility to analyze the evolution of the food offer (T0 vs T+1)

ightarrow Number of products gathered by Estonia





ightarrow Number of products by subcategories of Breakfast cereals gathered by Estonia



ightarrow Analyze of the food offer in Austria



Examples of indicators produced for monitoring reformulation

Analysis of labeling parameters

44



45

 \rightarrow Front of pack labeling observed on products collected in Ireland

Proportion of collected products with or without front of pack labeling, by category



Examples of indicators produced for monitoring reformulation

Evolution of labeled nutritional values



46

ightarrow Analysis of the variability of sugar content in Breakfast cereals collected in Estonia



Sugar distribution among subcategories by data collection

Breakfast cereals (n=832)

🛱 ТО 🛱 Т1



 \rightarrow Analysis of the evolution of sugar content by paired products (same reference collected at 2 times) of the Chocolate-flavoured cereals collected in Estonia





A lot of other treatments/uses could be possible on the basis of the data collected during Best Remap but will not be done in the framework of the Joint Action:

□ Analysis of ingredients list:

- Evolution of the use of food additives
- Use of intense sweeteners
- Allergens...

Direct comparison of common references across Europe (dual quality of food products)

□ Any other relevant analysis to assess food policies



Next steps and expected results

\Box Data collection, entry and encoding for Batch 2 of the 2nd snapshot \rightarrow ongoing

- Planned from July 2022 to July 2023
- Data collected as T+1 data
- 8 countries, for which a first data collection (T0) was carried out by Euremo
- No data analysis in the context of Best-ReMaP

Assesment of the potential impact of reformulation on intakes ongoing

- Planned for the countries with branded data prior to Best-ReMaP (Ireland, Germany, Austria, Belgium, Estonia, Hungary, Romania and France)
- Using data available in the EFSA Comprehensive European Food Consumption Database

\Box Comparison of food reformulation between countries \rightarrow ongoing

Same countries as for assessments on intakes



> Best-ReMaP - WORK Package 5 Reformulation and processed food monitoring







6- What could be the use of such a monitoring tool? (several answers possible)

□ Assess nutritional policies

- □ Compare products/countries
- Define adapted regulations
- □ Feed generic composition databases





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Strengths of Best-ReMaP methodology

Specific classification system

- Grouping "similar" products (similar sales name, manufacturing technology, recipe, or marketing positioning)
- Specifically designed to monitor composition data
- Adapted to identify margin of reformulation
- Detailed enough to encourage manufacturers to reformulate their products but not too complex
- Discussed with the food industry

Common methodology and tools

- Trainings of participating countries
- Use of templates
- Dissemination of guidelines for all major steps, especially codification of products
- Implementation of R programs for the production of indicators (number of products by subcategory of products, statistics on nutritional values – mean, median, standard deviation, first and third interquartiles)



Quality checks

- Verification of data entry by Anses (classification, type of brand)
- Implementation of R programs for quality check

 1st verification program → data entry problems (misspelling, missing mandatory fields, ...)
 2nd verification program → consistency problems (categories/codes, sub-categories/codes, values/units,...)
 3rd verification program → outliers in nutritional values
 4th verification program → matching between T0 and T+1 data

Common database developped by the JRC

- First database at European level
- Branded composition data from 19 countries

Ensure the homogeneity/quality of collected data



Limits of Best-ReMaP data collections

□ No assessment of representativeness

- → Limited number of retailers visited
- \rightarrow Difficulties met to go into the shops
- \rightarrow Limited number of collected products for some countries
- \rightarrow Coverage of the market not evaluated

Restricted to 5 Best-ReMaP food categories

 \rightarrow 5 out of 32 categories

Continuation of the monitoring necessary after the end of the Joint Action with dedicated budget and human resources



Conditions of success for the sustainability of actions

- □ Appropriation of the methodology by the partners
- After the project : Extension to all Best-ReMaP food categories + follow up
- ❑ Creation and maintenance of the database by the JRC
 → to keep it open and living

Dedicated resources

Continuation of the actions of Best Remap in the new joint action on non communicable diseases



Context for the new proposal

- 1. High quantity of data produced in Janpa / Euremo / Best Remap
- Limited exploitation of the results

 → Allocated time in Best Remap not sufficient to conduct complete statistical analyses/comparisons for 1st and 2nd data collections batch 1
 → No time allocated for analysis of the batch 2
- 3. Opportunity to continue the work of Best Remap in the new JA-NCD
- 4. No possibility to coordinate further analysis for the JRC

 \rightarrow Coordination of a task to analyse all European data collected at the branded level by Anses in the next JA-NCD



JA-NCD: task to analyse all European data collected at the branded level

1. Content of the proposal

- **State of play** with the most up to date datasets codified in Best-ReMaP nomenclature
 - Comparisons of nutritional data between 19 countries for 5 food groups and targeted nutrients (sugar, saturated fat, salt)
 - ✓ Benchmark between countries
 - Explanation of differences in link with nutritional policies (implementation of taxes, thresholds...)
 - ✓ Identification of the « Best in class » products to promote reformulation within and between countries
 - If available, integrate new datasets from countries monitoring composition data at branded level



- Monitoring of reformulation

- Trend assessment of reformulation for batch 1 and batch 2 of Best-ReMaP : 14 countries
 - Recodification of EUREMO data in Best-ReMaP subcategories when necessary for five food groups / 8 countries
 - $\checkmark\,$ Identification of best evolutions in link with nutrition policies
 - ✓ Benchmark between countries

Assessment of impact of reformulation on nutrient intakes

- For countries with a follow-up and with consumption data (available in the EFSA comprehensive database) and for the 5 food groups
 - Impact of observed reformulation on nutrient intakes for sugar, fat, saturated fat and salt
 - Scenarii to assess the impact of possible reformulations on nutrient intakes (establishement of thresholds to remove the « worst» products)

2. Justification of the proposal

- Objectives :
 - \checkmark To show the strength of the gathered data to support public policies
 - To provide data to promote reformulation
 - Outcomes:
 - ✓ Added value to the data gathered during JANPA, EUREMO, Best-ReMaP and by countries on their own
 - \checkmark With a reasonable cost regarding the cost of the data collection

- Coordination of the task:

- Anses can take in charge this task with its experience of Oqali, Janpa, Euremo and Best-ReMaP
- Close collaboration needed with concerned countries to explain the results





The JA Best-ReMaP Final Conference : September 18th, 19th and 20th, in Paris



edu video about us

project teams 🛩 🛛 results

news intranet

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From Evidence to Action - Sustaining the Impact of Best-ReMaP

18-20 September 2023 - Paris, France



Greetings and welcome to the **Best-ReMaP Joint Action Conference** website! We are thrilled to bring together all of our project partners and stakeholders to celebrate the achievements and impact of our joint action.

Please note, that the full-day Conference on 18 September will be followed by a General Assembly of the partners of the Best-ReMaP Joint Action from the morning on the 19th to lunchtime on the 20th September 2023.

The address of the venue: Ministry of Health and Prevention, 14 Avenue Duquesne 75007, Paris.

Day 1 18 September 2023 Open Conference of the Best-ReMaP Joint Action Day 2 19 September 2023 General Assembly meeting for the partners of the Best-ReMaP project	DAY	DATE	EVENT
Day 2 19 September 2023 General Assembly meeting for the partners of the Best-ReMaP project	Day 1	18 September 2023	Open Conference of the Best-ReMaP Joint Action
	Day 2	19 September 2023	General Assembly meeting for the partners of the Best-ReMaP project
Day 3 20 September 2023 General Assembly and Steering Committee meeting	Day 3	20 September 2023	General Assembly and Steering Committee meeting

Participation at these events is free of charge. The language of the events is English.

The main focus of the Best-ReMaP Joint Action is on adapting, replicating and implementing effective health interventions, based on practices that have been proven to work in the areas of food reformulation, reducing food marketing to children and public procurement of healthy food in public settings, thus contributing to increased offer of healthier options of processed foods (by reducing salt, sugar and fat from the processed foods) available in EU (super)markets.

Details on : <u>https://bestremap.eu/paris-conference/</u>



Comments or questions?



Best-ReMaP

Healthy Food for a Healthy Europe

Thank you for your attention! <u>karine.vin@anses.fr</u> or <u>wp5_bestremap@anses.fr</u>

The Joint Action focusing on the implementation of validated best practices in nutrition – Best-ReMap

This presentation arises from the Joint Action Best-Remap. This Joint Action is addressing the adaption, replication and implementation of effective health interventions, based on practices that have been proven to work in the areas of food reformulation, framing of food marketing and public procurement of healthy food in public settings, under the framework of the Third Health Programme (2014-2020). Sole responsibility lies with the author and the Consumers, Health, Agriculture and Food Executive Agency is not responsible for any use that may be made of in the information contained therein.

