

# The European Commission's science and knowledge service

## Joint Research Centre



**Update on ongoing JRC study:  
Overview of existing and proposed FOP schemes,  
including literature review of research regarding  
the development of the schemes, their impact on  
consumers and other effects**

Joint meeting on front-of-pack nutrition labelling between Working Group of the Standing Committee on Plants, Animals, Food and Feed - Regulation (EU) No 1169/2011 on the provision of food information to consumers (FIC) & Advisory Group on the Food chain, Animal and Plant Health,  
**Brussels, 23 April 2018**

# Outline

- Background
- JRC study objectives
- Overview of FOP schemes
- Study outline/approach to 'Effects of FOP schemes on consumer understanding and behaviour'
- Discussion

# Background

- Commission report on the use of additional forms of expression and presentation, their effect on the internal market, and the advisability of further harmonisation in this field (-> Regulation (EU) No 1169/2011)
- The report will take a broad perspective on the provision of simplified nutrition information to consumers, including schemes that strictly speaking would not fall under Article 35 and can legally be considered as "voluntary information" or "nutrition claims".

# JRC study – objectives and scope

- To conduct a literature review and gather further information on:
  - FOP nutrition labelling systems, their features and their use
  - Consumer understanding and consumer behaviour
  - Public health benefits
  - Other potential intended or unintended effects or impacts of the introduction of FOP schemes
- To identify knowledge gaps

# Preliminary overview of FOP schemes

FRONT-OF-PACK NUTRITION LABELLING SCHEMES (includes current, proposed, experimental) - compiled from Codex survey, BEFIT, NOURISHING					
Country	FOP scheme name and reference	What does the scheme look like on pack? (provide a picture if possible)	Implemented (using) or proposed	Voluntary or Mandatory?	Developer/owner (government, in state the nature of)
<b>Schemes used in several European countries</b>					
EU	Reference Intakes (RI) (Formerly Guideline Daily Amounts (GDA)) <a href="http://www.referenceintakes.eu/understanding-label.html">http://www.referenceintakes.eu/understanding-label.html</a>		Implemented	Voluntary	Industry (CIAA, the Confectionery Industries of the EU) (the food in 2006 in the nutrition labelling scheme apply it on a voluntary basis)
EU	Evolved Nutrition Label <a href="http://evolvednutritionlabel.eu/">http://evolvednutritionlabel.eu/</a>		Proposed	Voluntary	Industry (Initiative of initially 6 companies)
Belgium, Czech Republic, Poland, (Netherlands)	Choices logo <a href="https://www.choicesprogramme.org/">https://www.choicesprogramme.org/</a> Legal reference (only NL) Decree of the Minister of Health, Welfare and Sport of 8 April 2013, 107657-101400 VGP, approving the Vinkje as food choice logo and its conditions of use <a href="https://zoek.officielebekendmakingen.nl/stcrt-2013-9664.html">https://zoek.officielebekendmakingen.nl/stcrt-2013-9664.html</a> Decree of the Minister of Health, Welfare and Sport of 16 March 2016, 340144-140165 VGP, extending the approval of the Vinkje as food choice logo and its conditions of use <a href="https://zoek.officielebekendmakingen.nl/stcrt-2016-14512.html">https://zoek.officielebekendmakingen.nl/stcrt-2016-14512.html</a> Ministerial communication on phasing out of Choices logo in NL (in Dutch: Mededeling Staatssecretaris Vinkje (RVO/VOEL 27 oktober 2017)) <a href="https://www.rvo-minvwsz.nl/documenten/vergoederstukken/2017/10/27/mededeling-staatssecretaris-vinkje-ovm-del-27-oktober-2017">https://www.rvo-minvwsz.nl/documenten/vergoederstukken/2017/10/27/mededeling-staatssecretaris-vinkje-ovm-del-27-oktober-2017</a>		Implemented (but being phased out in the Netherlands by late 2018, planned to be replaced by an app)	Voluntary	Industry (Unilever/FrieslandCampina)
Sweden, Denmark, Iceland and Norway, Lithuania, Macedonia	Nordic Keyhole <a href="http://www.norden.org/en/news-and-events/keyhole-milestone">http://www.norden.org/en/news-and-events/keyhole-milestone</a> Legal reference On 17 June 2009, Sweden, Denmark, and Norway announced that the Keyhole is a joint Nordic labelling scheme. <a href="http://norden.diva-portal.org/smash/get/diva2:700622/FULLTEXT01.pdf">http://norden.diva-portal.org/smash/get/diva2:700622/FULLTEXT01.pdf</a> Lithuania Order of 23 February 2011, No. V-213, amending the Order of 22 January 2014, No. V-50 of the Minister of Health on the labelling of foodstuffs by "Keyhole" symbol <a href="https://isam.lrv.lt/lt/valkos-sirtyas-ir-vozmenes-veiklos-prizastis/mitybos-informacijos-2011-02-23-2011-02-23-2011-02-23">https://isam.lrv.lt/lt/valkos-sirtyas-ir-vozmenes-veiklos-prizastis/mitybos-informacijos-2011-02-23-2011-02-23-2011-02-23</a>		Implemented	Voluntary	Government (Swedish National Food Agency)

Country	FOP scheme name and reference	What does the scheme look like on pack? (provide a picture if possible)	Implemented (using) or proposed	Voluntary or Mandatory?	Developer/owner (government, in state the nature of)
Croatia	"Healthy Living" (Ivjeti zdravo) Guarantee Mark Based on Choices logo system, but with more or less different criteria. <a href="https://www.kajz.hr/wp-content/uploads/2016/10/Ivjeti-zdravo-LowRes.pdf">https://www.kajz.hr/wp-content/uploads/2016/10/Ivjeti-zdravo-LowRes.pdf</a> <a href="https://www.kajz.hr/wp-content/uploads/2015/06/Healthy-Living-Food-criteria.pdf">https://www.kajz.hr/wp-content/uploads/2015/06/Healthy-Living-Food-criteria.pdf</a>		Implemented	Voluntary	Government (Croatian Institute of Public Health)
France	Nutri-Score <a href="https://www.santepubliquefrance.fr/Sante-publique-France/Nutri-Score">https://www.santepubliquefrance.fr/Sante-publique-France/Nutri-Score</a> Legal reference Arrêté du 31 octobre 2017 fixant la forme de présentation complémentaire à la déclaration nutritionnelle recommandée par l'Etat en application des articles L. 3232-8 et R. 3232-7 du code de la santé publique <a href="https://www.legifrance.gouv.fr/eli/arr/2017/10/31/SSA-PIT30474_AJJO/tece">https://www.legifrance.gouv.fr/eli/arr/2017/10/31/SSA-PIT30474_AJJO/tece</a>		Implemented	Voluntary	Government
Finland	Heart logo <a href="https://www.sydanmerkki.fi/en">https://www.sydanmerkki.fi/en</a>		Implemented	Voluntary	Public Health Body, etc.
Malta	Traffic Light labelling (to be checked further)				
Netherlands	Retailer scheme: Afl trial for meat products with improved nutritional composition (reduced content of salt, sugar, unnecessary E numbers and artificial additives; possibly even complete removal)		Implemented	Voluntary	Industry (producer; retailers etc.)
Poland	Traffic Light labelling (to be checked further) Nutrition Traffic Light		Proposed	Voluntary	Government (Ministry of Health)

# Preliminary overview of FOP schemes

This preliminary overview forms the basis for:

- A further in-depth analysis and review
- Gathering information on consumer understanding/behaviour, public health benefits, other (un)intended effects and impacts

-> Please tell us if you identify:

- Any incorrect information
- Any missing FOP scheme or key information

# Preliminary overview of FOP schemes

Column	Variable	Column	Variable
A	Country	J	Information focus (nutrient-specific / summary indicator / food group)
B	FOP scheme name and reference	K	Reference base (100 g, portion, etc)
C	What does the scheme look like on pack?	L	Nutrients and other elements displayed
D	Implemented (using) or proposed	M	Nutrients and other elements used in nutrient profile model
E	Voluntary or Mandatory	N	Scope products
F	Developer/owner of the scheme	O	Adaptations for food groups
G	References to research that informed the development of the scheme	P	Exempted products
H	Is the scheme evaluative / interpretive or reductive?	Q	Monitoring / Evaluation
I	Message tone positive / neutral / negative		



# Examples of possible database queries 1/3

FOP Scheme  
developer /  
owner



Industry

Logos: 150 CALORIES PER BOTTLE, 250 CALORIES PER BOTTLE, SMART PICK (SMART AND QUICK, A BETTER PICK!), and various national health logos (Kosher, Halal, Healthy Choice, etc.).



Government

Logos: NUTRI-SCORE (A-E), Health Canada labels, Health Star Rating (3.5), and other government health logos.



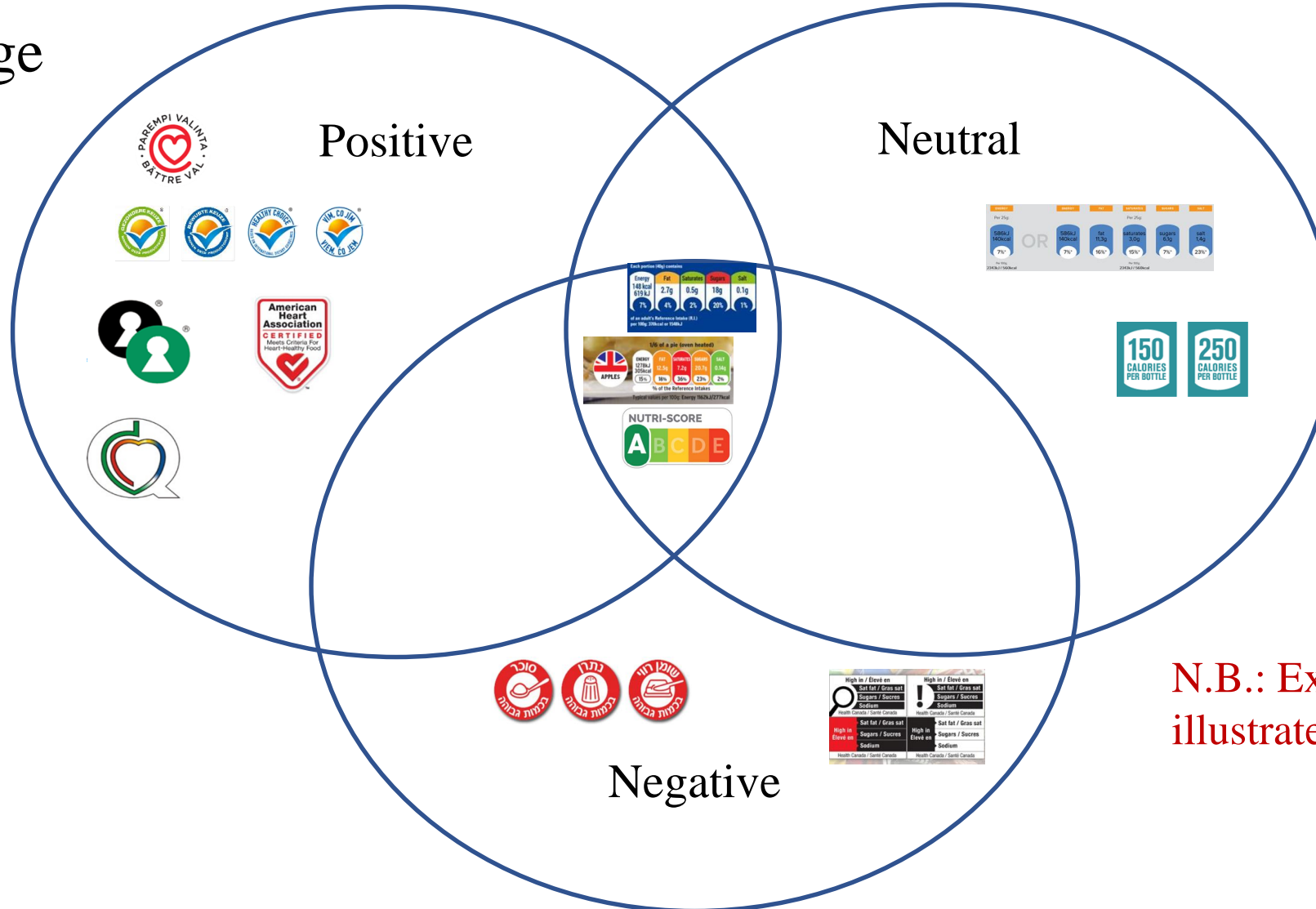
Other

Logos: PAREMPI VALINTA BÄTTRE VAL, American Heart Association CERTIFIED, and a stylized heart logo.

N.B.: Examples of schemes to illustrate approach

# Examples of possible database queries 2/3

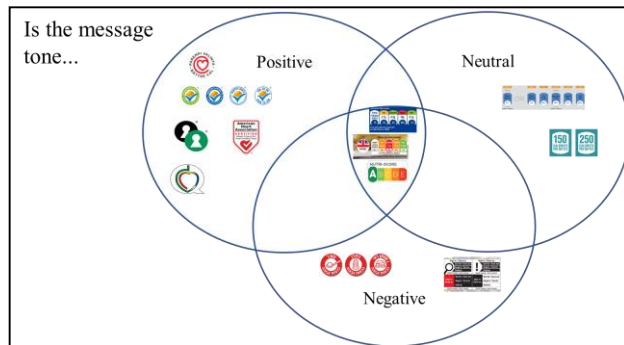
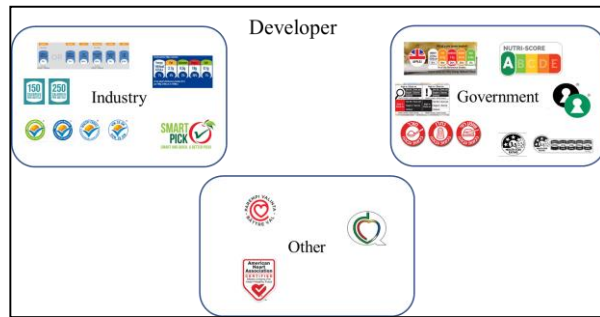
Is the message tone...



N.B.: Examples of schemes to illustrate approach

# Examples of possible database queries 3/3

## More complex queries combining variables



Column	Variable	Column	Variable
A	Country	J	Information focus (nutrient-specific / summary indicator / food group)
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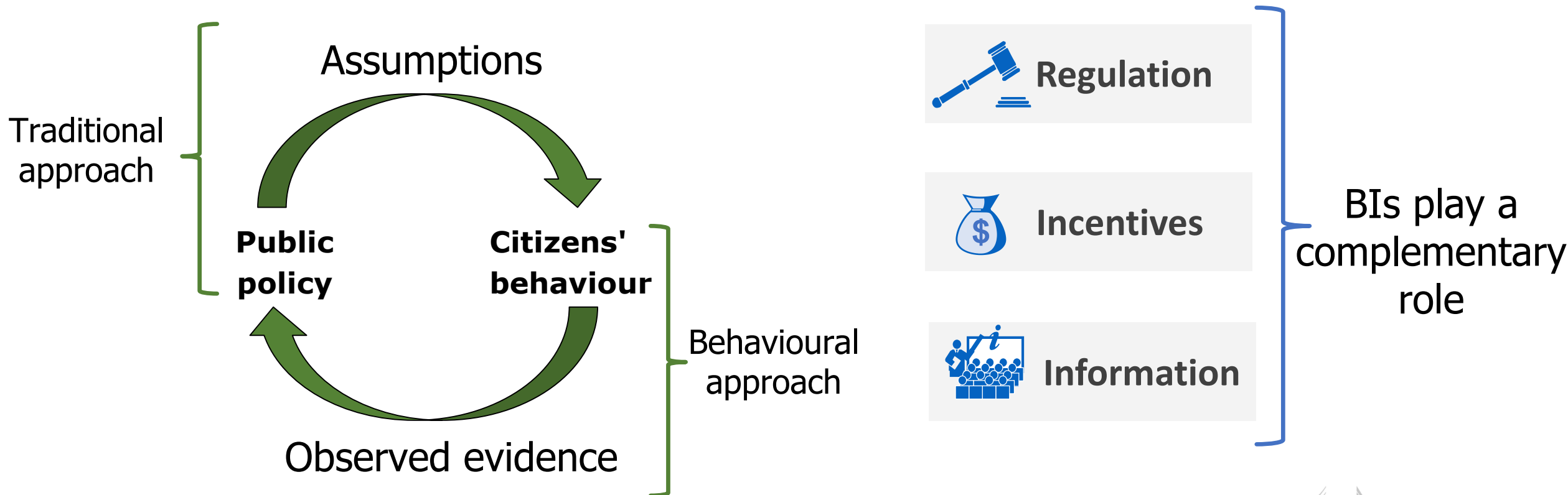
# Front-Of-Package Labelling

## A literature Review from a Behavioural Angle

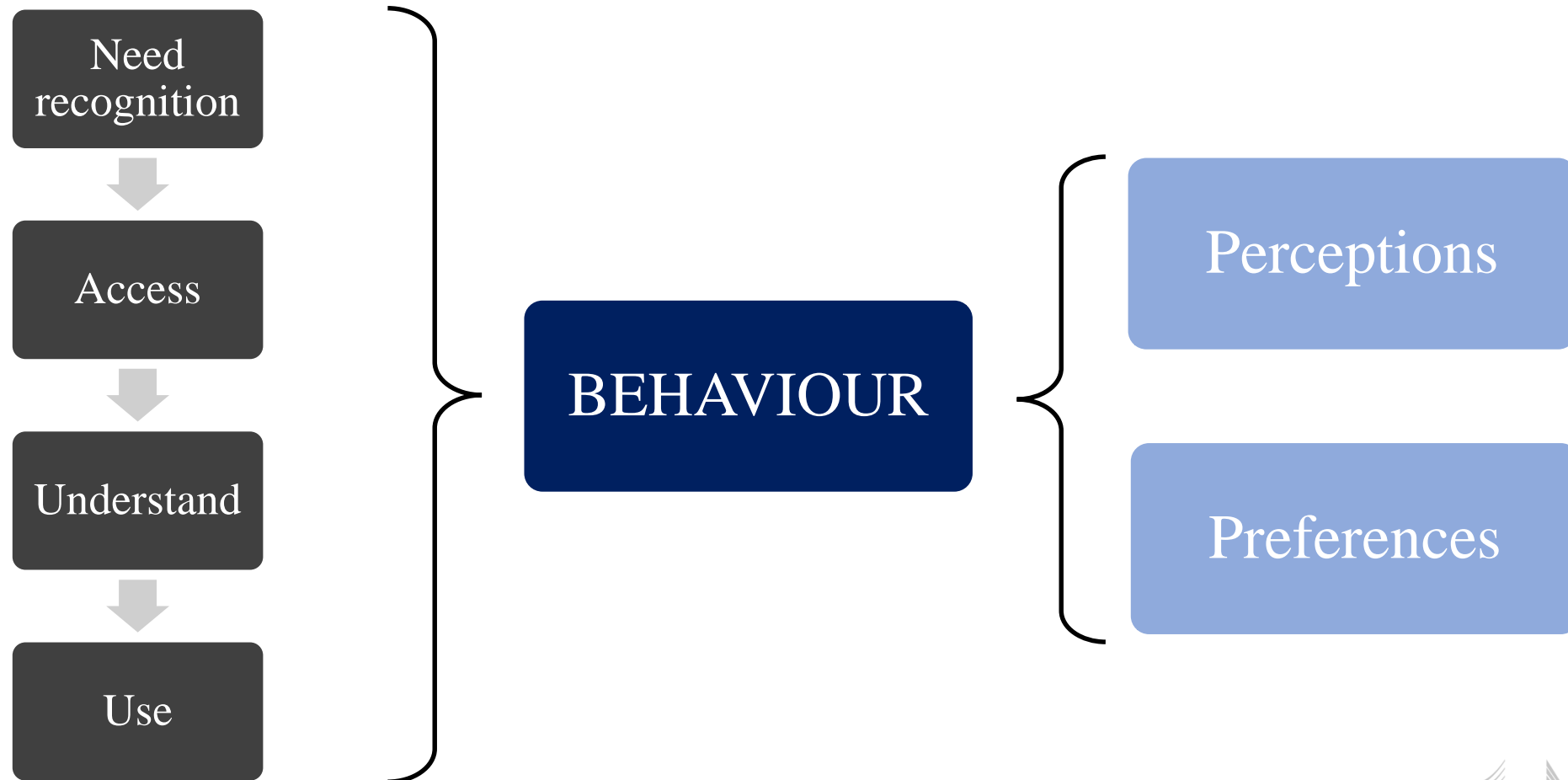
23 April 2018

# The role of Behavioural Insights (BIs)

**BIs inform policy-making by shedding light on how people *really* behave.**



# Consumer decision-making process



# Just an *average* consumer?

**AVERAGE CONSUMER:** reasonably well informed and reasonably observant and circumspect

## **Observed differences by (among others):**

1. Age and gender;
2. BMI;
3. Ethnicity;
4. Estimated risk of poor dietary choices;
5. Countries (and familiarity with a given labelling system);

**The beh lit review will shed light on these relevant differences**



# Examples of impact of other labels on Supply Side

What about the impact of FOP labelling systems on industry reformulation of food products?

## RESEARCH ARTICLE

HEALTH AFFAIRS > VOL. 34, NO. 11 : FOOD & HEALTH

### Restaurants With Calories Displayed On Menus Had Lower Calorie Counts Compared To Restaurants Without Such Labels

Sara N. Bleich<sup>1</sup>, Julia A. Wolfson<sup>2</sup>, Marian P. Jarlenski<sup>3</sup>, and Jason P. Block<sup>4</sup>

AFFILIATIONS

PUBLISHED: NOVEMBER 2015 No Access

<https://doi.org/10.1377/hlthaff.2015.0512>

EPC requirement was in effect. We conclude that there is a supply-side response to energy-efficiency labels.

David Comerford & Ian Lange & Mirko Moro, 2016. "[The Supply-side Effects of Energy Efficiency Labels](#)," Working Papers 2016-01, Colorado School of Mines, Division of Economics and Business.

## Studies: Putting calories on menus affects restaurants more than consumers

Hadley Malcolm, USA TODAY Published 4:16 p.m. ET Nov. 2, 2015 | Updated 4:39 p.m. ET Nov. 2, 2015

# The case of energy labelling

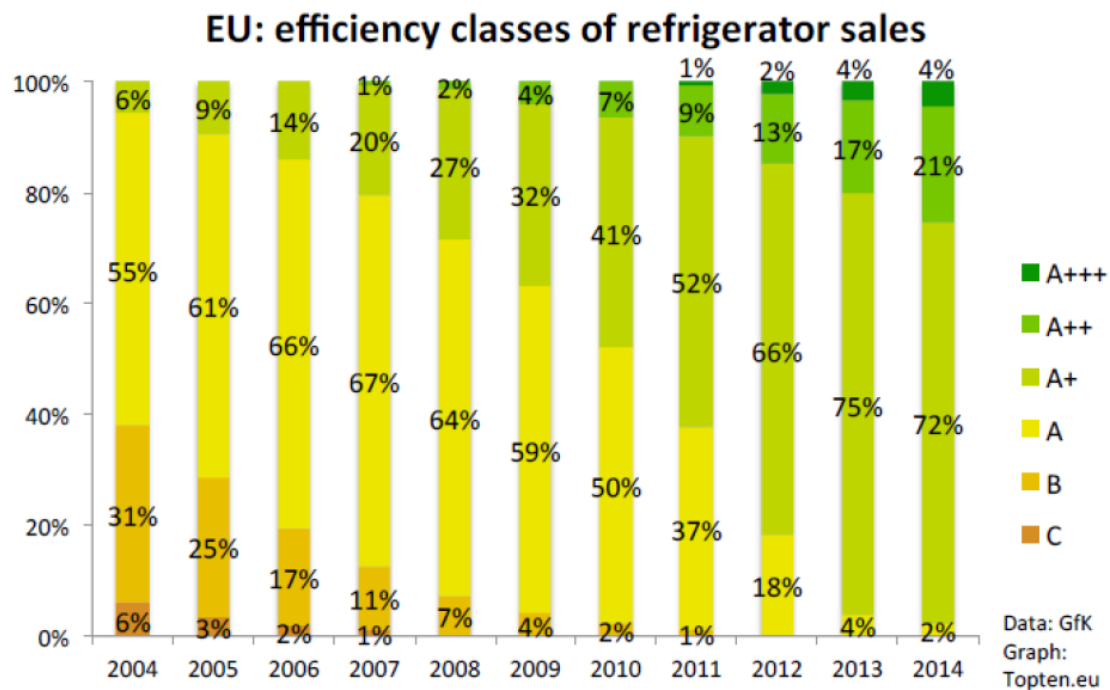


Figure 3a: Transformation of the EU Market for refrigerators

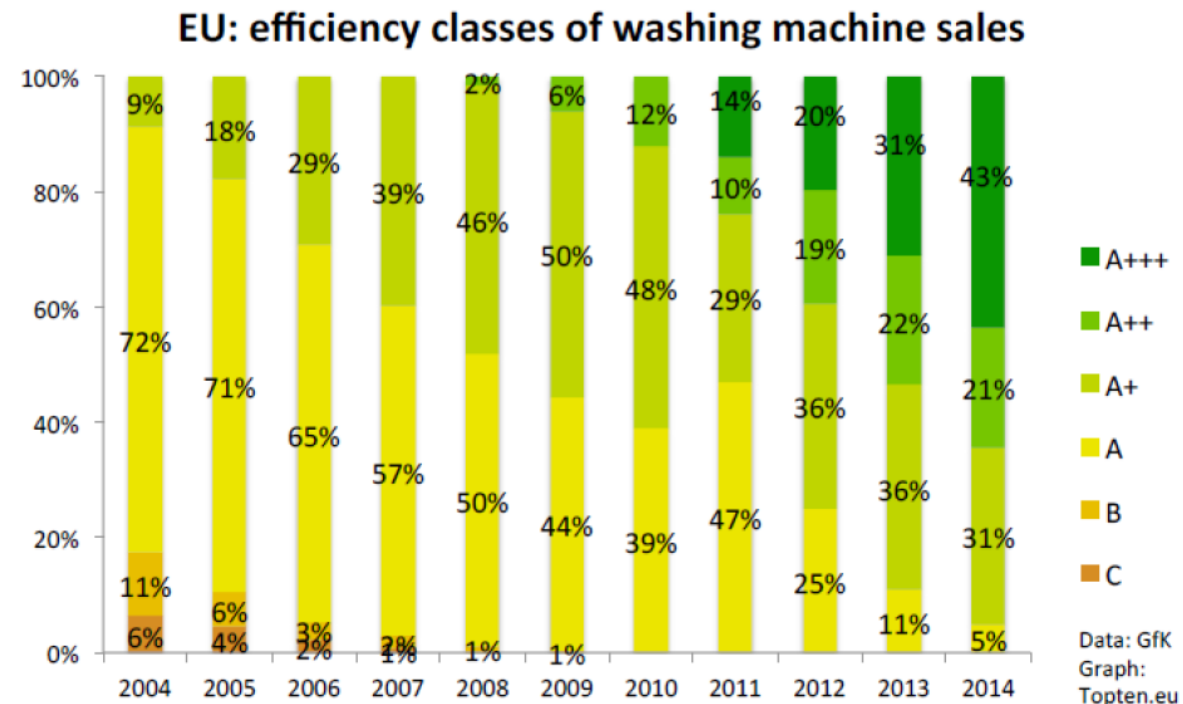


Figure 3b: Transformation of the EU Market for washing machines

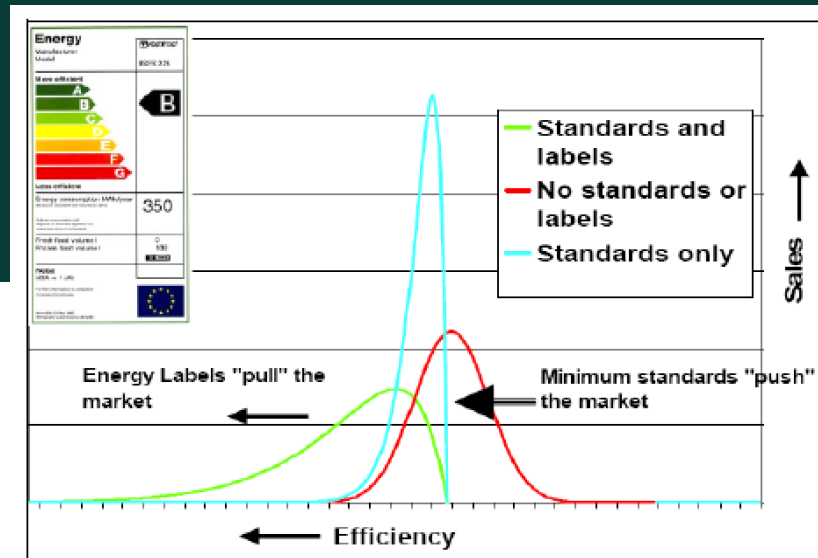


Figure 2: The combined effect of ecodesign ('minimum standards') and energy labels

# Approach for the behavioural literature review

## **Sources:**

1. Scientific Articles (PubMed Platform)
2. Relevant grey literature

## **Keywords:**

1. Front of Package Labelling
2. Front of Pack Labelling

## **Selection and exclusion:**

1. Title and abstracts are screened, excluded if either
  - a) Did not mention relevant research, or
  - b) Made neither reference to consumer use nor to the impact on producers.

# Appetiser (an extensive beh literature exists)

N	Authors	Review	Year	Approach	Sample size	Country(ies)	Main results
1	Hawley et al	Public Health Nutrition	2012	Structured Review	28 studies (2004-2011)	Various	MTL works best
2	Kelly et al	Health Prom Int	2009	Survey + Experiments	790	Australia	TL label allowed the selection of the healthier food product
3	Borgmeier et al	BMC Pub Health	2009	2 Experiments	420	Germany	MTL highest % of correct choices + (clarity ≠ use)
4	Gorton et al	Public Health Nutrition	2009	Survey	1,525	New Zealand	STL and then MTL work best, MTL most preferred
5	Ducrot et al	Nutrients	2015	Surveys	15,420	France	5-CNL works best for adults at risk of poor dietary choices
6	Mejean et al	Public Health Nutrition	2012	Web-based questionnaire	38,763	France	MTL is most favoured
7	Watson et al	Appetite	2014	Web-based questionnaire	4,357	Australia	No individual scheme performed significantly better
8	Ductrot et al	A J of Prev Med	2016	Web-based questionnaire	11,981	France	5-CNL is effective in promoting overall healthier food choices in all population subgroups



**Thank you**



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Commission