Food Labelling to Advance Better Education for Life (2008-2011)

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SEVENTH FRAMEWORK PROGRAMME

Overall objectives

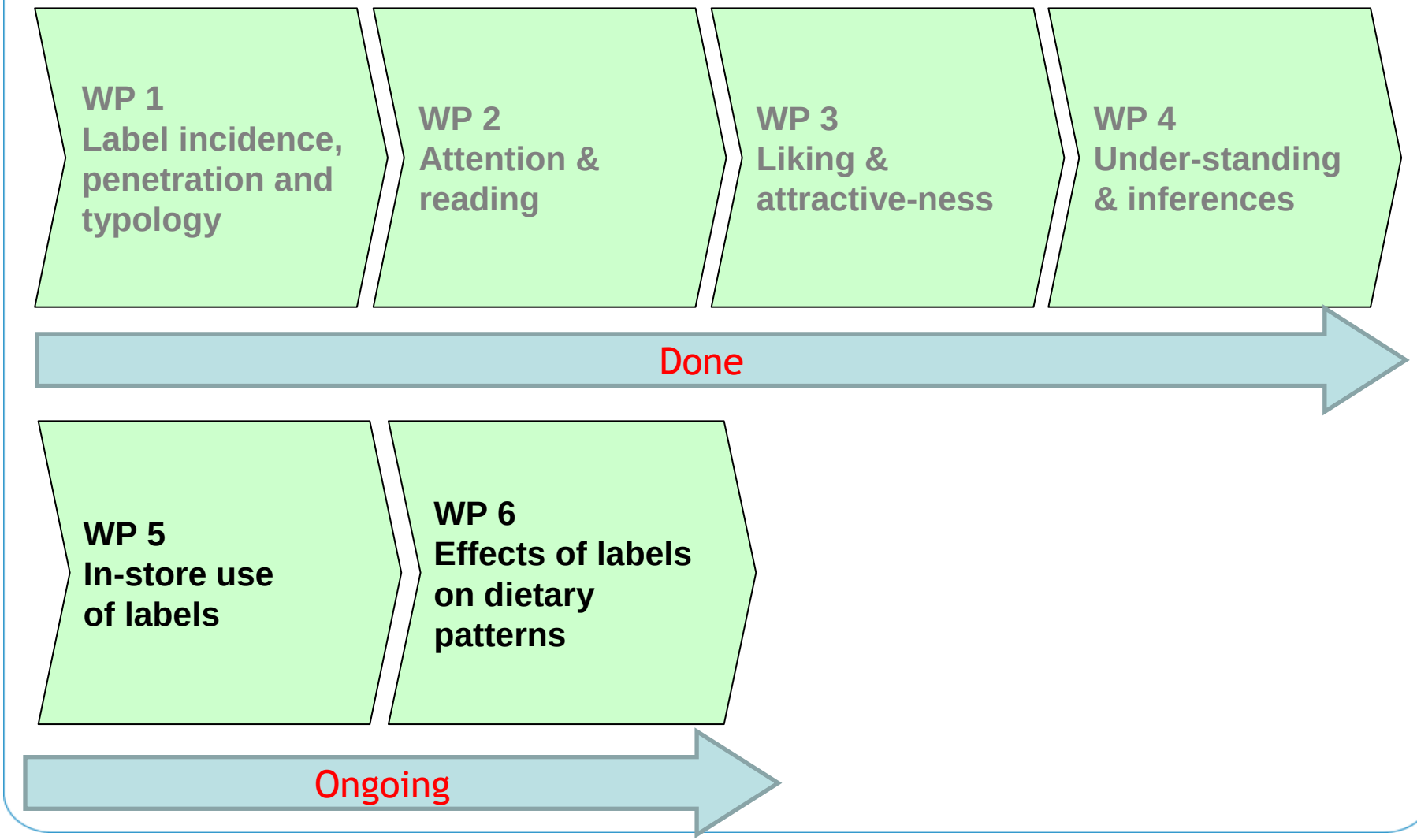
- To determine how nutrition information on food labels can affect **dietary choices, consumer habits and food-related health issues**
  - by developing and applying an interpretation framework incorporating both the label and other factors/influences

- To **develop guidelines** on use of nutrition information on food labels for EU policy and the food industry, especially SMEs
  - including recommendations for assessing the impact of ongoing and future legislative and voluntary food labelling schemes

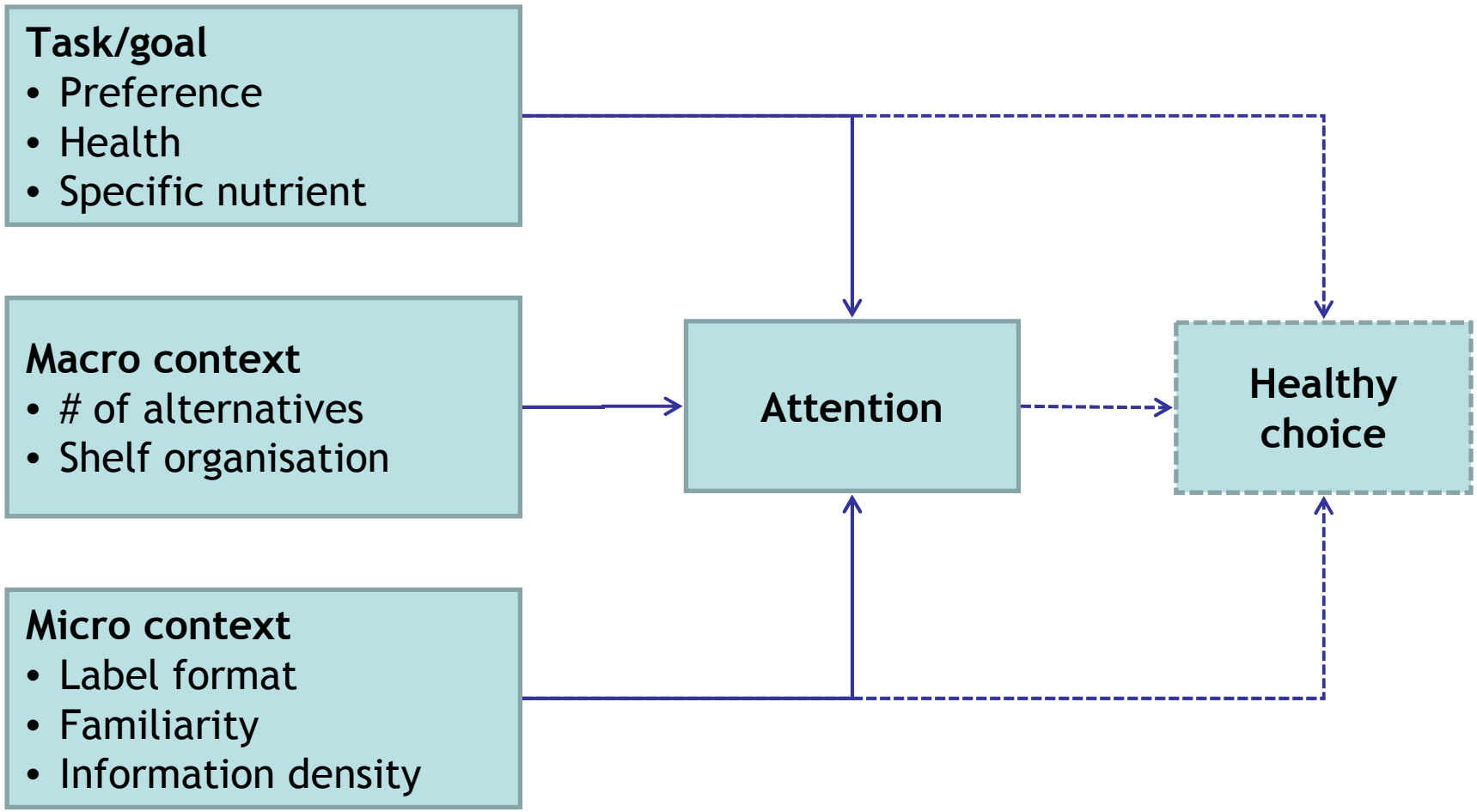
Consortium

- European Food Information Council – EUFIC, BE/EU (Coordinator)
- 8 Academic partners
- 2 Retail organisations
- 1 Consumer organisation
- 1 Industry organisation

Work Package (WP) Overview



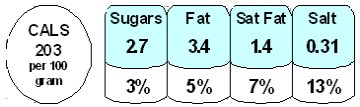
Done: Attention to and reading of labels (1/5)



Approach (2/5)

- 10 experimental studies in 4 countries
  - (Netherlands, Turkey, Germany, Poland)
- Visual identification, eye-tracking, choice tasks, recall

Different labels (combinations) as stimuli (3/5)



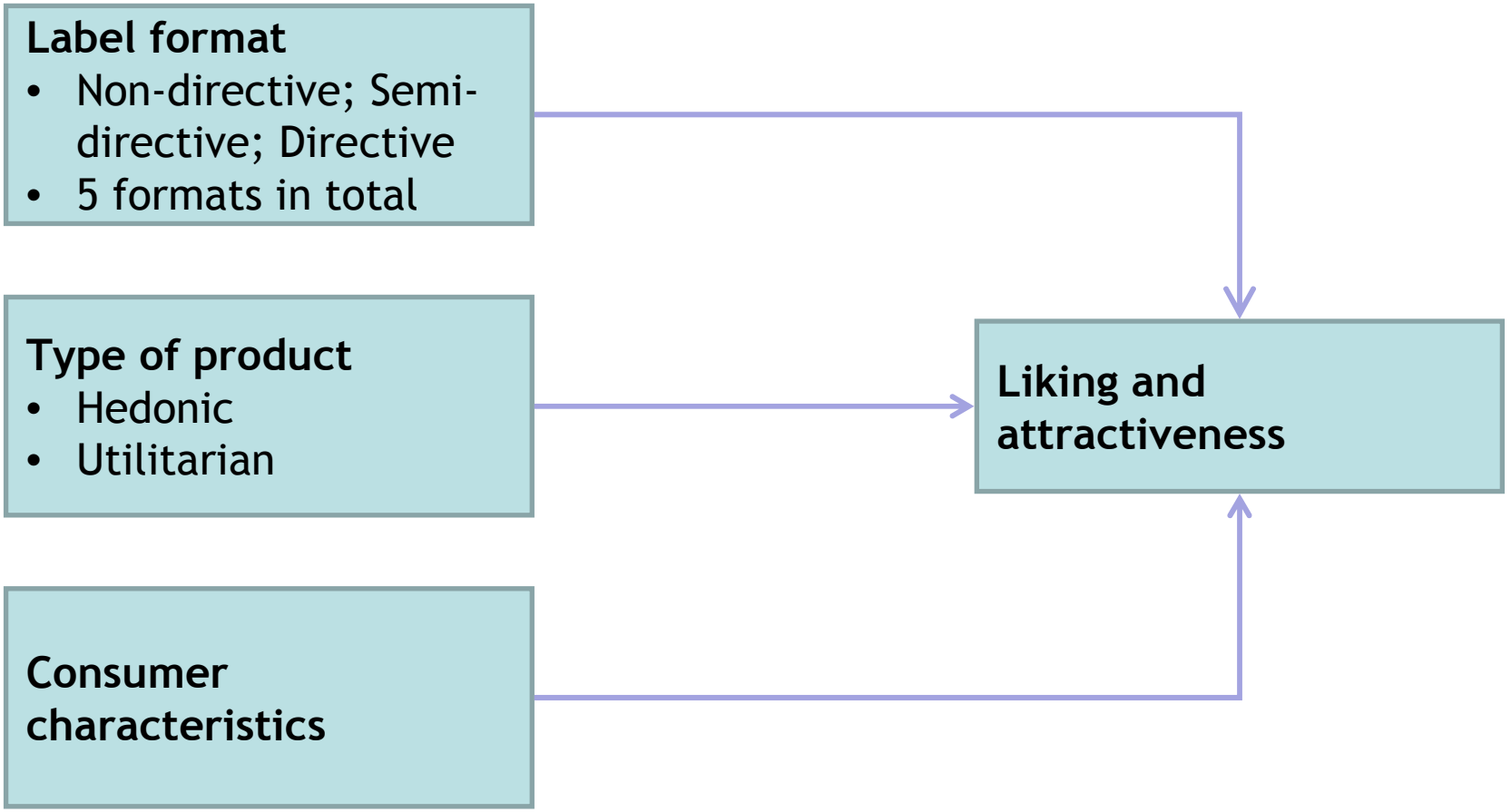
Findings on attention and reading (4/5)

- **Healthy mindset** improves label attention and usage, especially for **nutrition-specific** goals
- Label in **low density area** of pack improves label attention
- **Consistency** (in exposure and location) improves attention to labels
- **Time pressure** reduces attention for nutrition labels, but not for simple directive logo
- Attention increases with **directiveness** (i.e., is highest for simple directive logo)
- **Inspection time** longer for more complex versus simple directive logo
- Mixed results for **impact on choice** - simple directive logo worked best in Netherlands and Turkey, but results were more mixed in Poland and Germany

Attention & reading: Bottom line (5/5)

- Nutrition labels should
  - Cater for general as well as (nutrient-) specific health goals
  - Be easily attended to
  - Be intuitive in information processing
  - Reach a high level of awareness
  - Effectively affect choice behavior
- Combination of simple directive and analytical (semi-directive or non-directive) label

Done: Liking and attractiveness of labels (1/5)



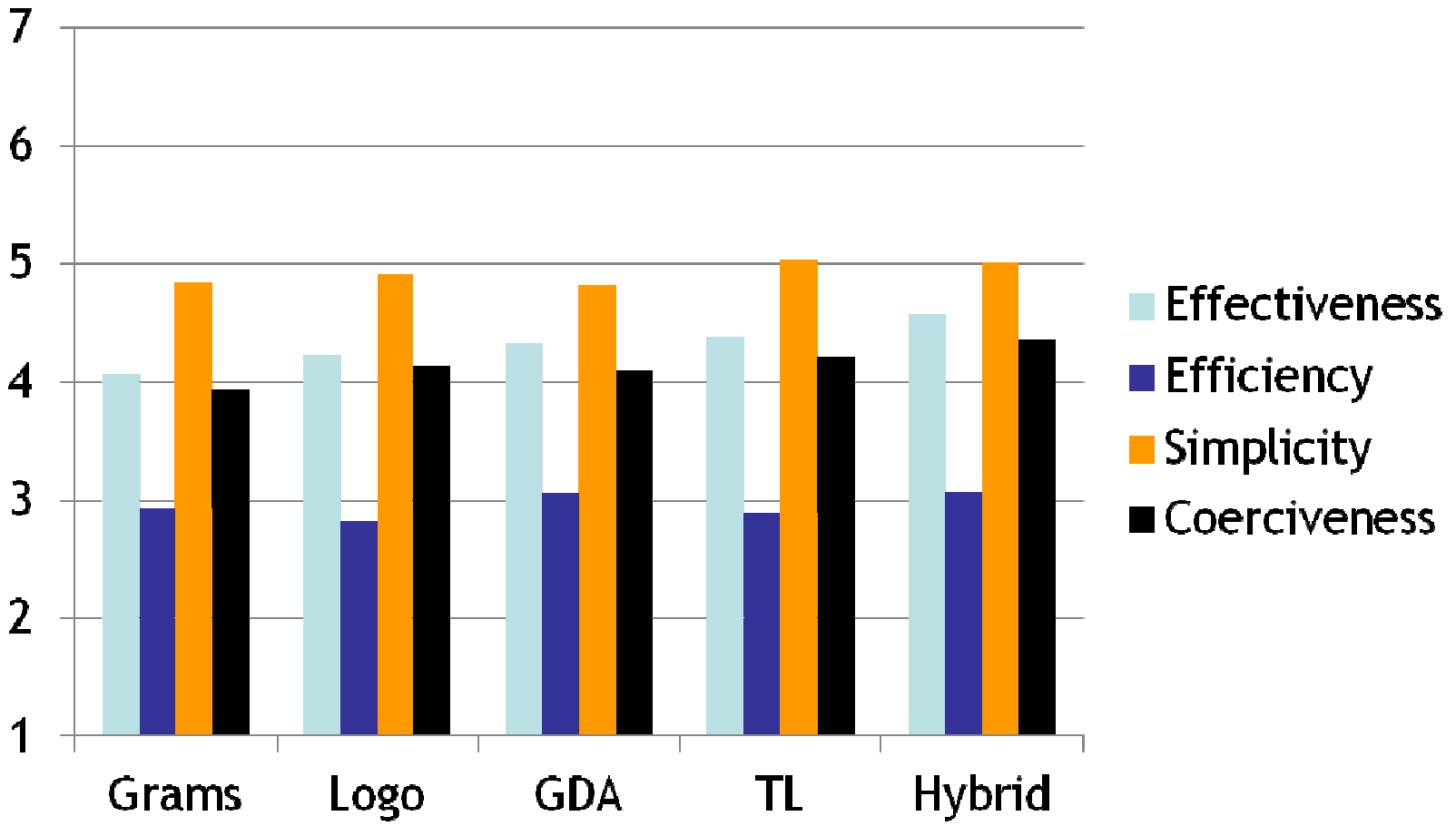
Approach (2/5)

- Survey
- N=2000 across four countries (UK, Poland, Turkey and Germany), i.e. n=500 per country
- Two tasks
  - Choice task
    - 5 labelling systems compared
    - Screening for awareness of labels
    - 4 food contexts (undisclosed, biscuits, pizzas, yoghurts)
    - 2 healthiness levels
  - Monadic evaluation task

Preference shares (3/5)

	Germany		Poland		Turkey		UK	
	Preference Share	Aware-ness	Preference Share	Aware-ness	Preference Share	Aware-ness	Preference Share	Aware-ness
kcal/grams	**6.7%**	10.7%	**7.8%**	7.4%	**10.5%**	8.3%	**4.4%**	8.8%
GDA	**6.4%**	6.3%	**14.3%**	12.8%	**10.9%**	6.0%	**13.7%**	20.9%
TL	**22.1%**	16.4%	**11.1%**	8.8%	**10.4%**	8.3%	**15.4%**	21.4%
GDA/TL HYBRID	**39.8%**	20.6%	**28.9%**	10.8%	**33.6%**	13.2%	**49.2%**	21.6%
HEALTH LOGO	**18.6%**	13.0%	**23.7%**	19.8%	**33.9%**	22.5%	**7.3%**	3.7%
NONE	6.4%	6.5%	14.2%	7.6%	0.6%	10.6%	10.0%	7.8%
DO NOT USE		26.7%		32.8%		31.1%		15.8%

Monadic evaluation (4/5)

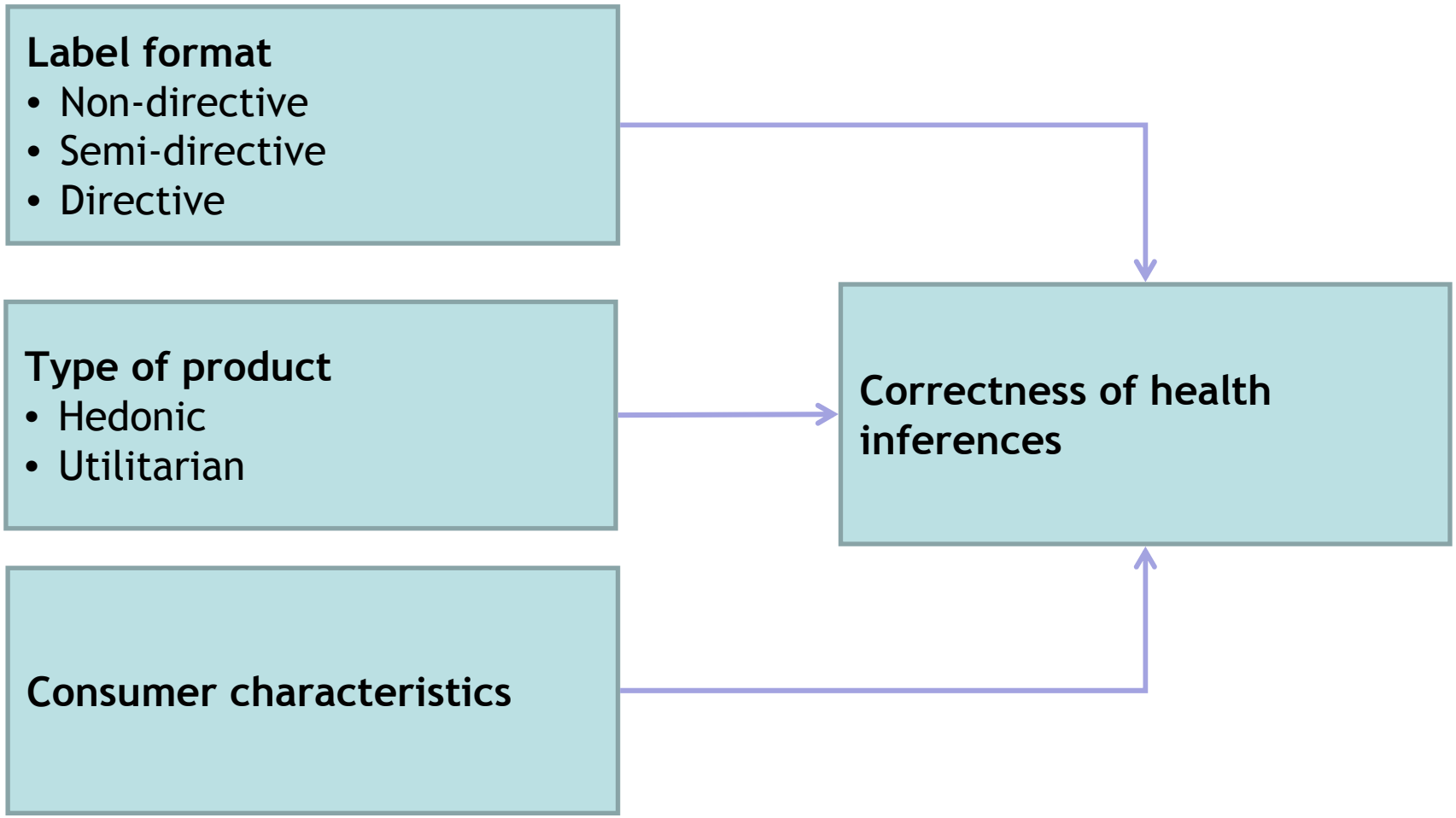


Liking and attractiveness: Bottom line (5/5)

- The GDA/TL hybrid system receives the highest scores for both liking and intended use
- There is some correspondence between awareness and preferences
- Very small differences in the monadic evaluation

- Labels with the highest amount of information and complexity are liked most, and liking depends on previous exposure

Done: Understanding and health inferences from labels (1/7)



Stimuli (2/7)

Each 150g portion (one pot) contains

Calories	Sugar	Fat	Saturates	Salt
105	11.7g	2.3g	1.4g	0.3g
5%	13%	3%	7%	5%

of your guideline daily amount

Each 150g portion (one pot) contains

Calories	MED	LOW	LOW	LOW
105	Sugar 11.7g	Fat 2.3g	Saturates 1.4g	Salt 0.3g

Each 150g portion (one pot) contains

	MED	LOW	LOW	LOW
Calories 105	Sugar 11.7g	Fat 2.3g	Sat Fat 1.4g	Salt 0.3g
5%	13%	3%	7%	5%

of your guideline daily amount

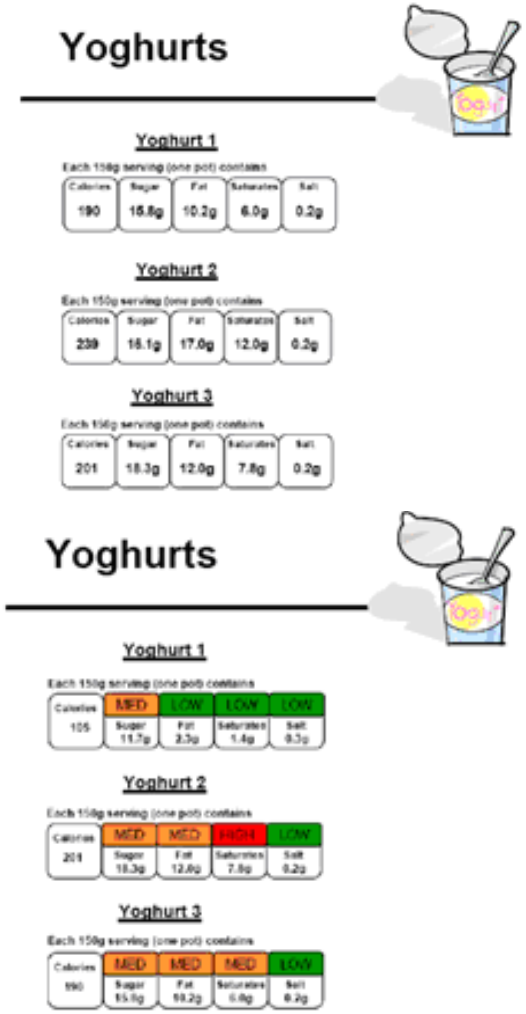
Each 150g portion (one pot) contains

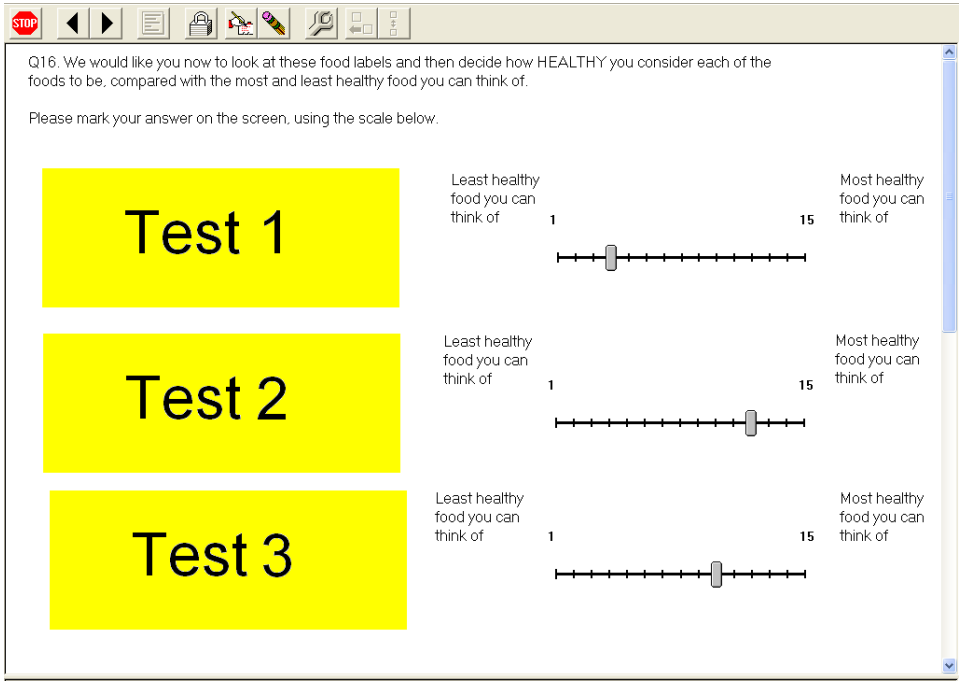
Calories	Sugar	Fat	Saturates	Salt
105	11.7g	2.3g	1.4g	0.3g

Approach (3/7)

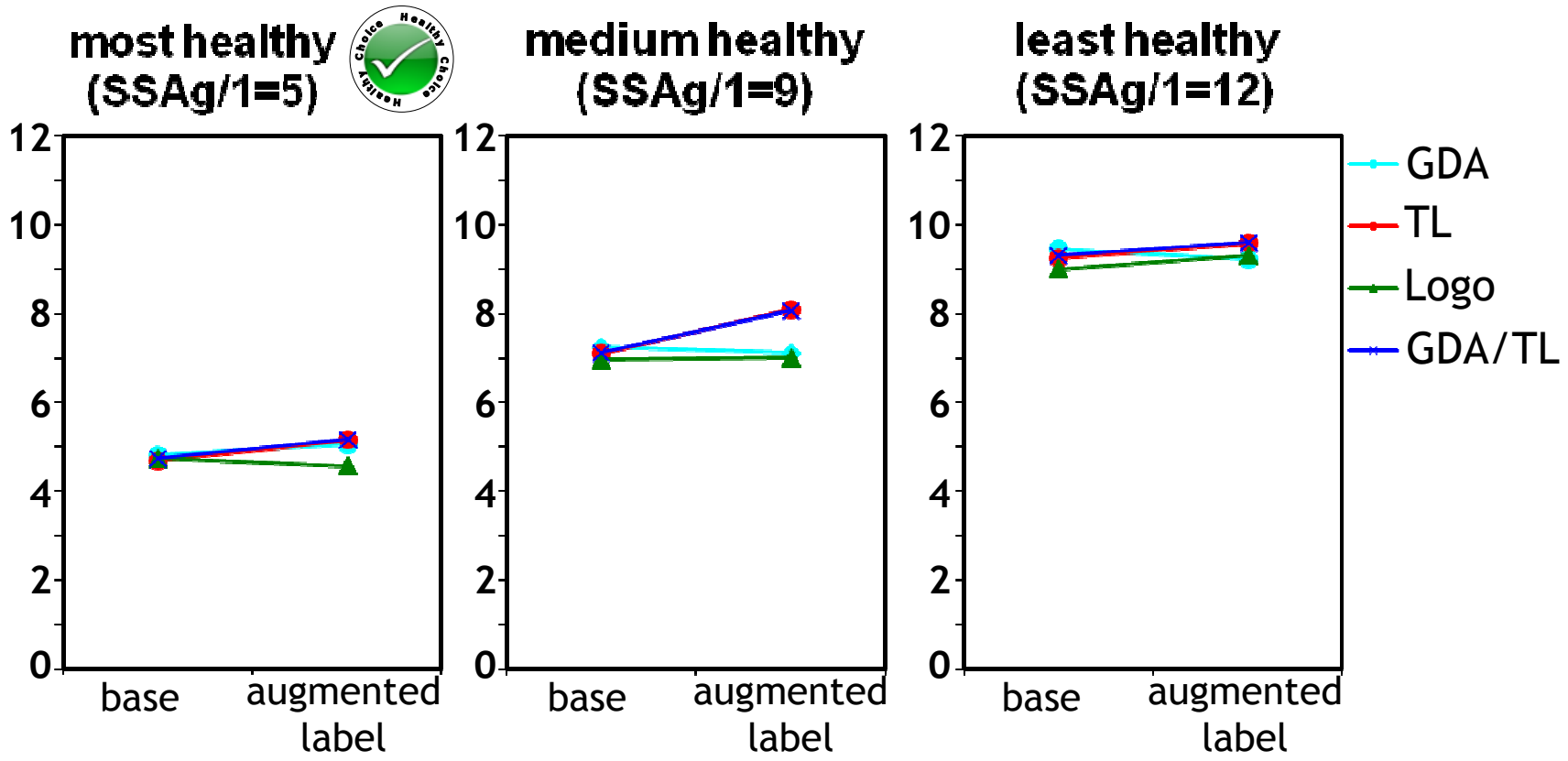
- Survey, same as used for measuring liking/acceptance
- FOP labelling systems tested across 12 food products representing 3 levels of healthiness within each of 3 food categories; pizzas, yoghurts, biscuits thus testing the full flexibility of each system
- Participants required to provide subjective healthiness ratings for 3 product variants in a given food category with baseline labelling system prior to being exposed to same 3 foods with FOP labelling
- Comparison of subjective health ratings with SSAg/1 as a benchmark

Approach (4/7)

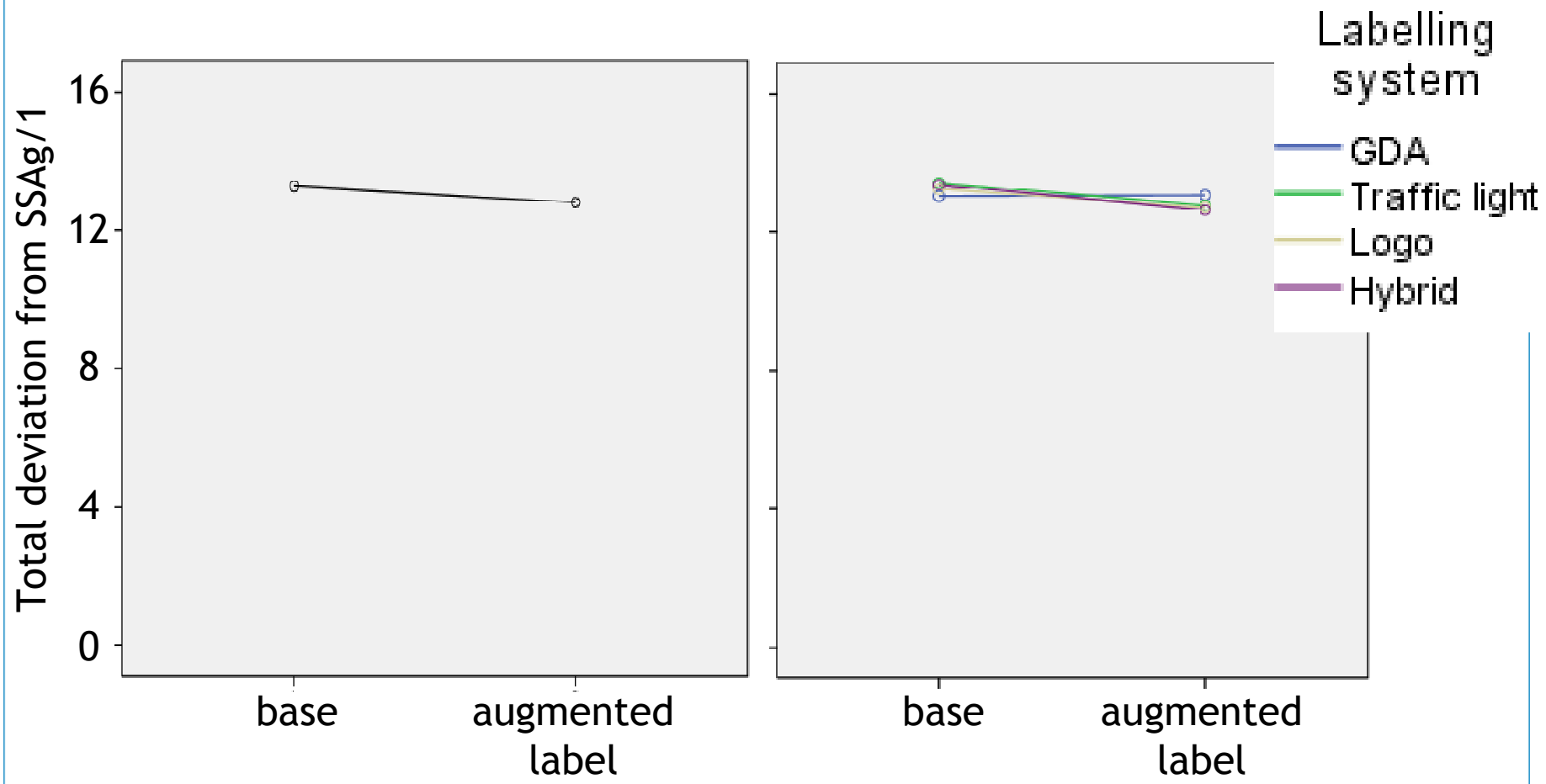

Yoghurts
Yoghurt 1
Each 150g serving (one pot) contains
Calories 190 Sugar 16.8g Fat 10.2g Saturates 6.0g Salt 0.2g
Yoghurt 2
Each 150g serving (one pot) contains
Calories 239 Sugar 16.1g Fat 17.0g Saturates 12.0g Salt 0.2g
Yoghurt 3
Each 150g serving (one pot) contains
Calories 201 Sugar 18.3g Fat 12.0g Saturates 7.8g Salt 0.2g
Yoghurts
Yoghurt 1
Each 150g serving (one pot) contains
Calories 105 MED Sugar 11.7g LOW Fat 2.3g LOW Saturates 1.4g LOW Salt 0.2g
Yoghurt 2
Each 150g serving (one pot) contains
Calories 201 MED Sugar 18.3g MED Fat 12.0g HIGH Saturates 7.8g LOW Salt 0.2g
Yoghurt 3
Each 150g serving (one pot) contains
Calories 190 MED Sugar 15.8g MED Fat 10.2g MED Saturates 6.0g LOW Salt 0.2g


STOP
Q16. We would like you now to look at these food labels and then decide how HEALTHY you consider each of the foods to be, compared with the most and least healthy food you can think of.
Please mark your answer on the screen, using the scale below.
Test 1
Least healthy food you can think of
1
15
Most healthy food you can think of
Test 2
Least healthy food you can think of
1
15
Most healthy food you can think of
Test 3
Least healthy food you can think of
1
15
Most healthy food you can think of

Results – biscuits (5/7)



Change in total deviation from SSAg/1 (6/7)



Understanding and health inferences from labels: Bottom line (7/7)

- Improvement in correct health inferences (as measured by SSAg/1) brought about by labelling systems beyond baseline label is very small

Preliminary conclusions

1. Provision of information on energy and key nutrients (fat, saturated fat, sugar, salt), in calories/grams per 100g, in a consistent way in terms of position, font, size, colour and background, combined with a health logo, will improve attention to food labelling, lead to good understanding, and facilitate healthy choices

- This conclusion is based on results from lab studies
- Does hypothesis hold in a real-world-like setting?

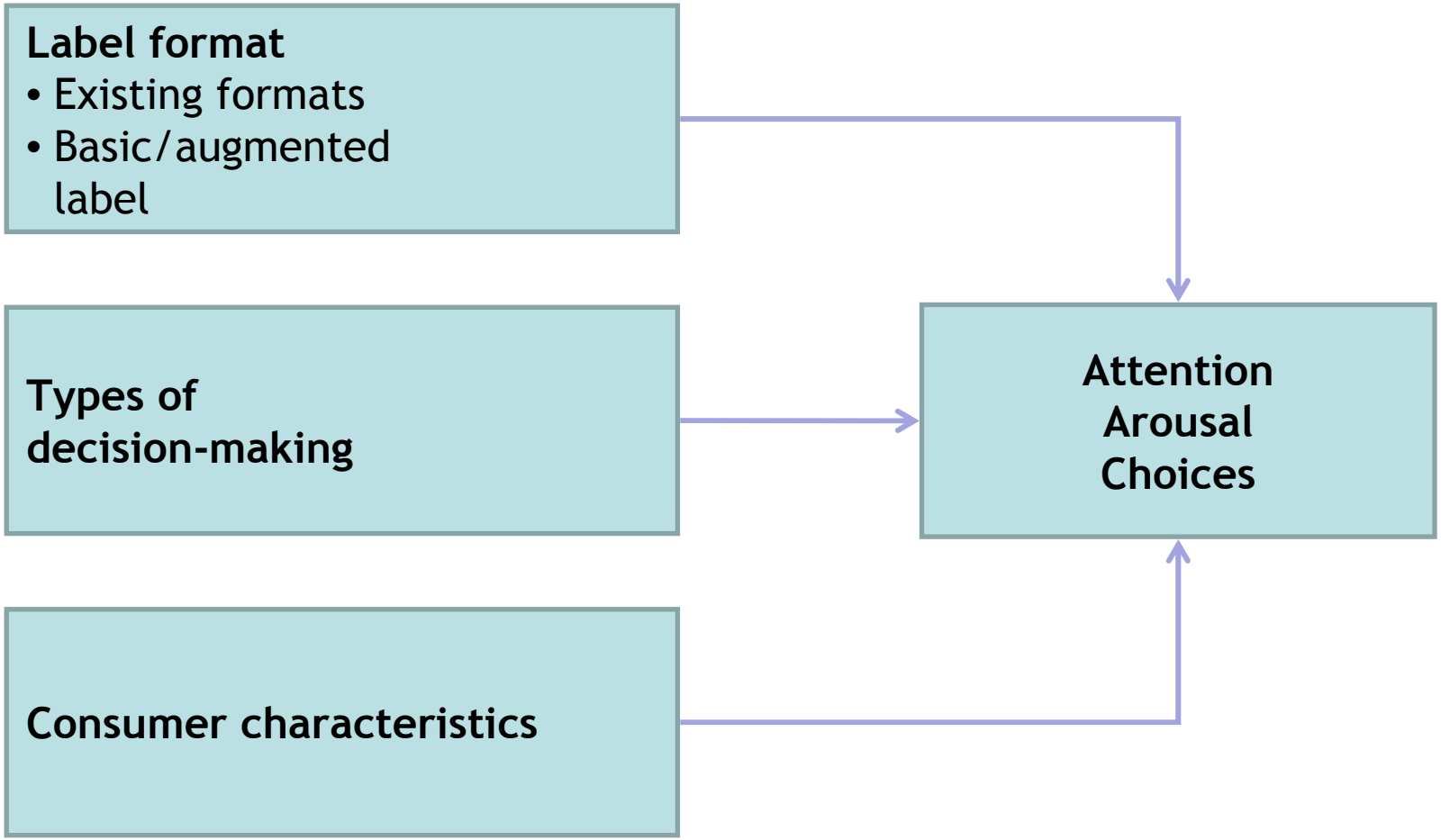
Ongoing: In-store use of labels (1/5)

Goals:

- Identify and quantify actual attention to and use of food labels in real-life store choice situations
- Quantify how much attention and actual use can be increased by implementing a label that provides information on energy and key nutrients (fat, saturated fat, sugar, salt), in calories/grams per 100g, in a way that is consistent in terms of position, font, size, colour and background, combined with a health logo

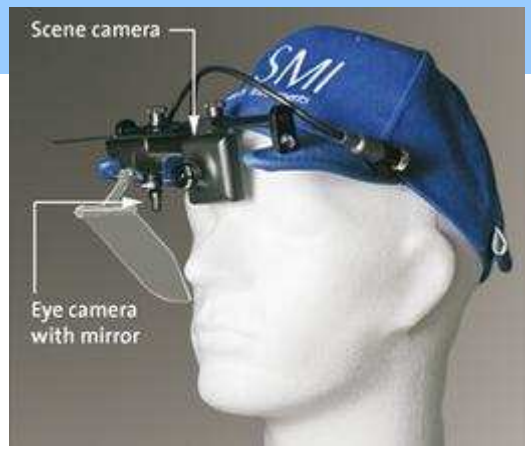
Note: background to match colour of package

In-store use of labels (3/5)



Methodology (4/5)

- Obtrusive and unobtrusive methods
  - Mobile eye tracking, electrodermal response
  - Point of sale interviews
  - Hidden observations
  - Sales figures from scanner data



- Three shelves

Preliminary conclusions

2. Additional label elements such as GDAs, colour coding, and provision of text “low/medium/high” will not increase attention and will not result in major improvements in understanding, but will increase consumer liking of the label and may nevertheless facilitate healthy choices.

- As attention is not of major importance here, and processes occurring once attention has been achieved are difficult to study in a real-life setting, this calls for another lab study

- This lab study should shed light on what can be achieved ***beyond*** the baseline label, and why effects, if any, occur

Working hypotheses

Why could label elements beyond the baseline label have an effect on healthy choice, if those effects are not due to better attention and/or better understanding?

- The label could prime the health motive
- The label could increase perceived self-efficacy in making healthy choices

New lab study - methodology

- Tests baseline label + text (high/medium/low) / TL colours / other colour coding (shading) / GDAs in a between-subjects design
- Choice task among 10 alternatives within one category, choice task among 20 alternatives within two, related categories
- Choice according to preference and according to perceived health
- Measures of motive salience and of perceived self-efficacy
- Dependent variable is healthiness of choice
- Field work in Germany and Poland – hall test

THANK YOU!

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