Food reformulation : Some insights based on OQALI results

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MINISTÈRE EN CHARGE DE LA CONSOMMATION

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Introduction

- **French Observatory of Food Quality (OQALI) has been set up in 2008** as part of the French Nutrition and Health Programme 2006-2010 by the Ministries in charge of Agriculture, Health and Consumer Affairs

- **Implemented and managed by 2 teams :**

  – The French Agency for Food, Environmental and Occupational Health & Safety (**Anses**)

  – The French National Institute for Agricultural Research (**INRA**)

- **Collaborations with manufacturers and retailers** :

  - To facilitate data collection
  - To establish relevant food classifications
  - To identify the main technological constraints for better interpreting the results

OQALI Goals

- To **collect and analyze nutritional data on branded processed foodstuffs**, taking into account socio-economic parameters (types of brands, market shares and prices)
- To **follow nutritional and labelling changes in the food supply** (nutrient contents, ingredients, serving sizes, claims, ..)
- To **publish periodic reports on labelling and food characteristics**
- To **assess voluntary commitment charters** signed by food stakeholders (manufacturers or retailers) with the public authorities

Introduction

Databases

Oqali database

- More than 25 000 food items from 25 different food sectors
- Covering between 49% (crackers) and 79% (cereal bars) of each food market
- Corresponding to almost 75% of the consumption of manufactured products and to 65% of energy intake of French consumers

MINTEL-GNPD Database : New products and innovations

INCA2 : Individual consumption

Kantar Worldpanel : Households purchases

Introduction

Means for improving the nutritional quality of the food supply :

- **Reformulating already existing products** :
  - Implicitly (i.e. without informing the consumer)
  - Explicitly (i.e. signaling it on the food package)

- **Launching new products, “better” than the current supply, in “lower quality” food categories**
(favor substitutions intra food categories)

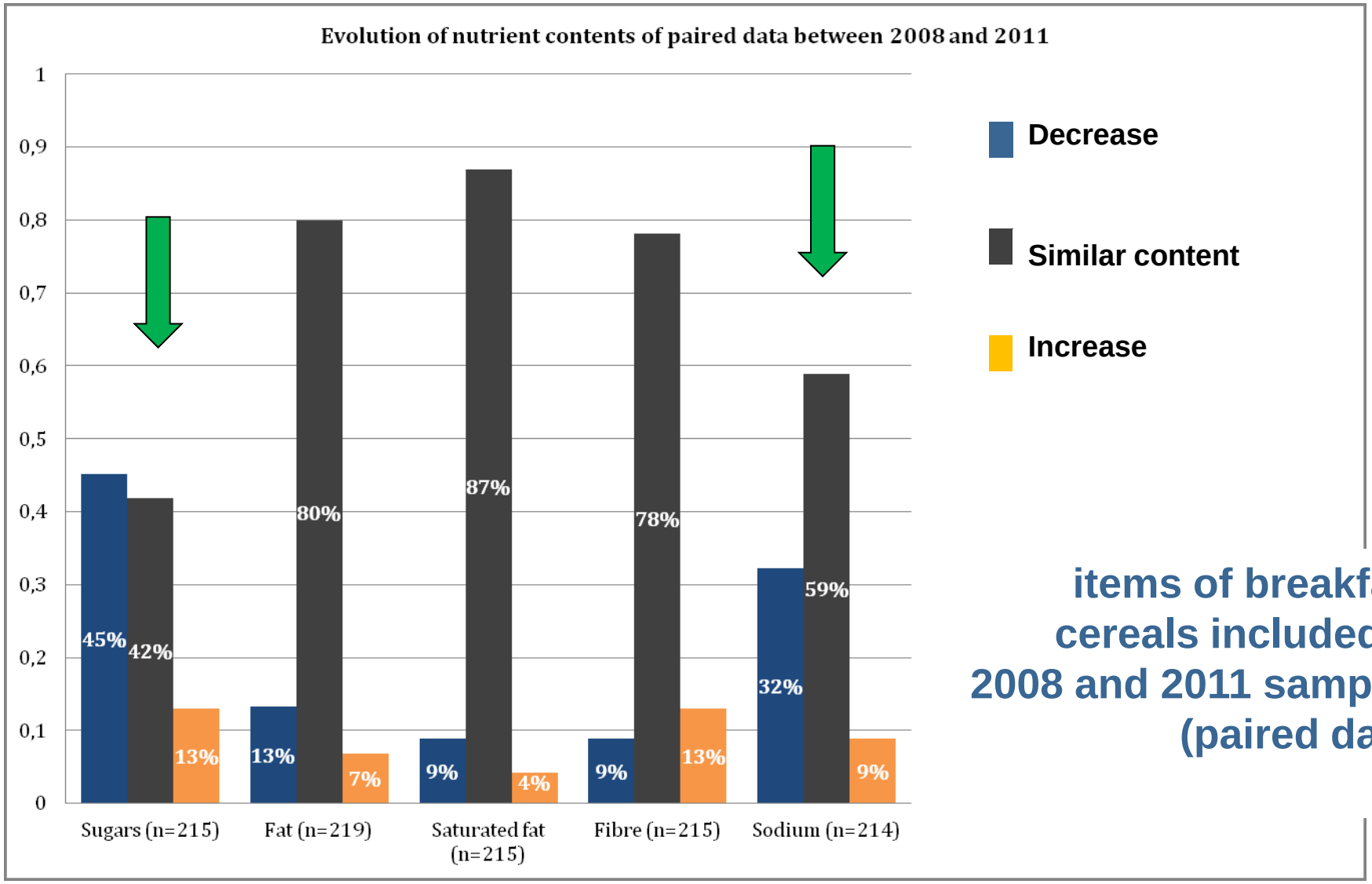
- **Removing from the market products in “lower quality” food categories and launching new products in “higher quality” food categories**
(favor substitutions inter food categories)

1. Product reformulation and innovations

2. Assessment of individual and collective voluntary commitments (« PNNS »Charts)

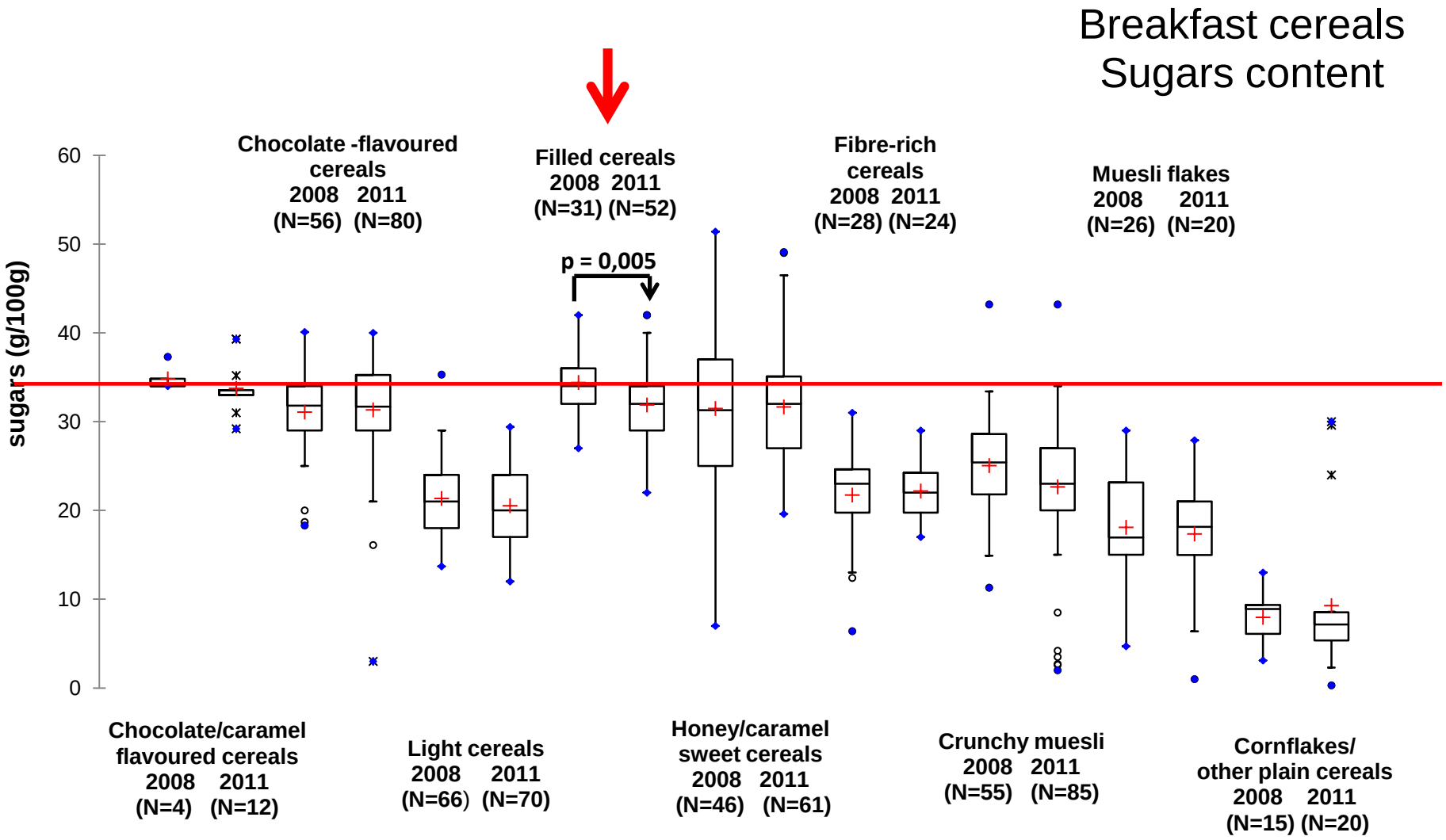
- Breakfast cereals

Product reformulation (paired samples in 2008 and 2011)



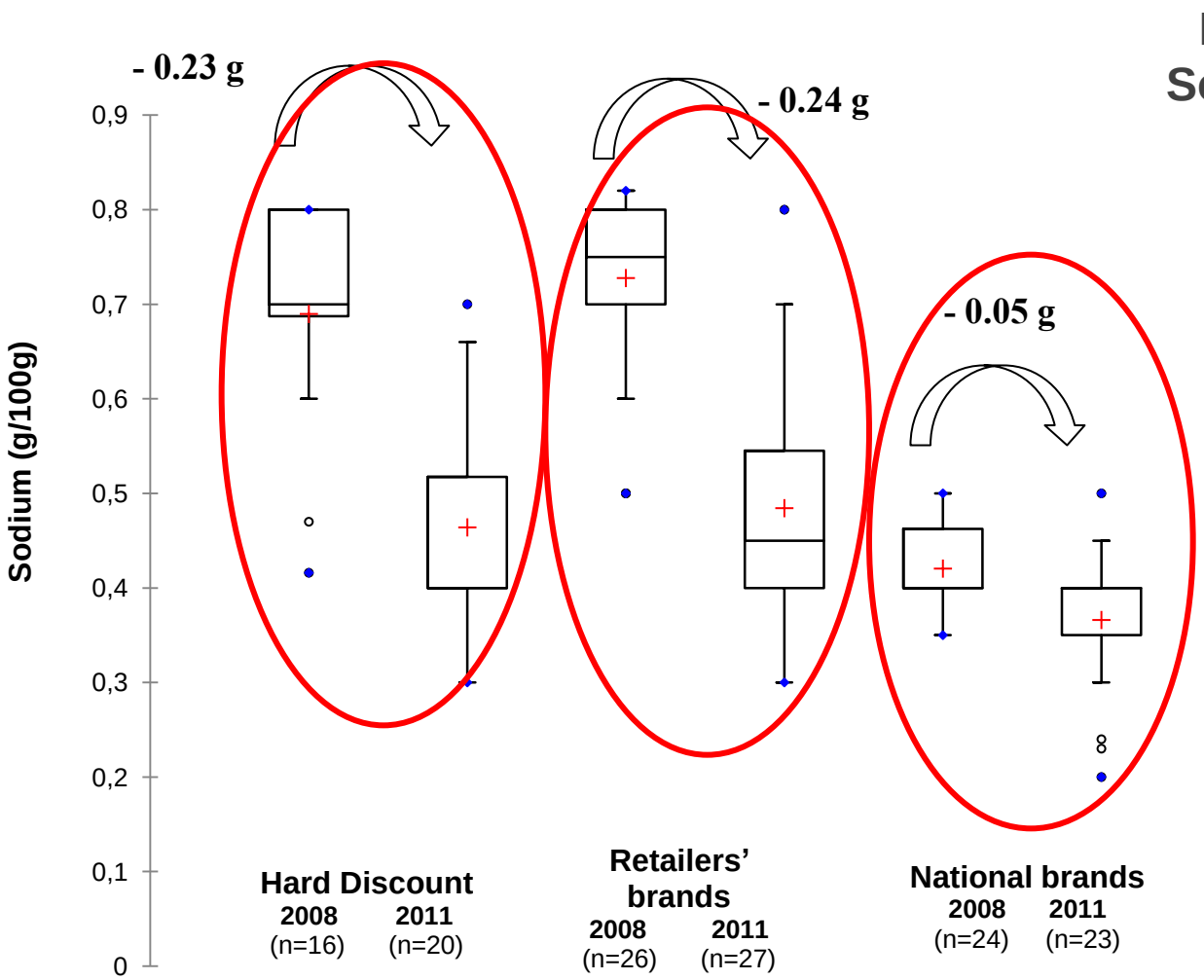
items of breakfast cereals included in 2008 and 2011 samples (paired data)

=> Significant evolutions are shown for filled cereals, which had one of the highest sugar mean content in 2008 (34.4 g/100g)



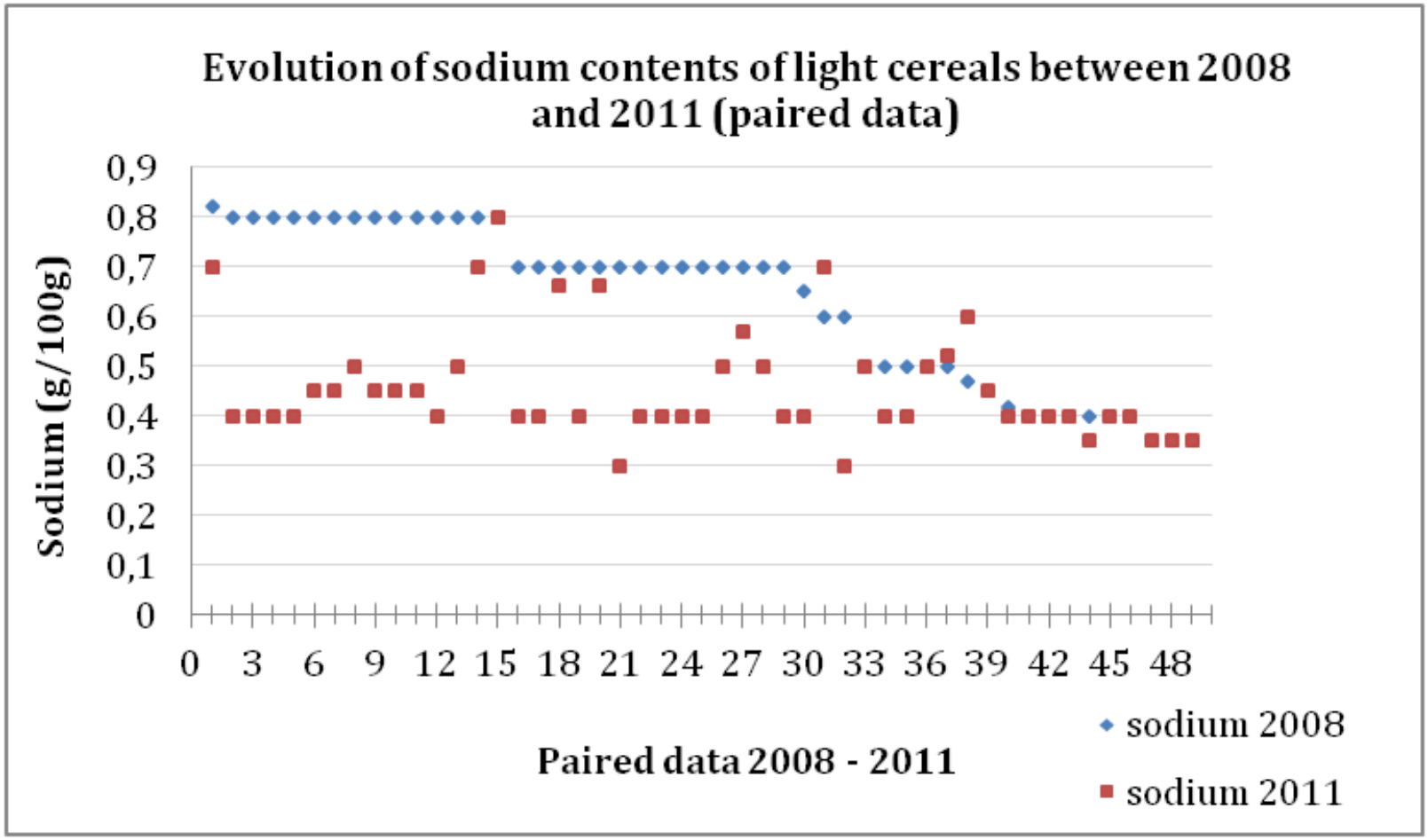
Product reformulation (paired samples in 2008 and 2011)

- Decreases in sodium contents between 2001 et 2008, mostly observed for national brands
- Decrease in sodium contents between 2008 and 2011 for all types of brands, especially for hard discount and retailers' brands



Product reformulation (paired samples in 2008 and 2011)

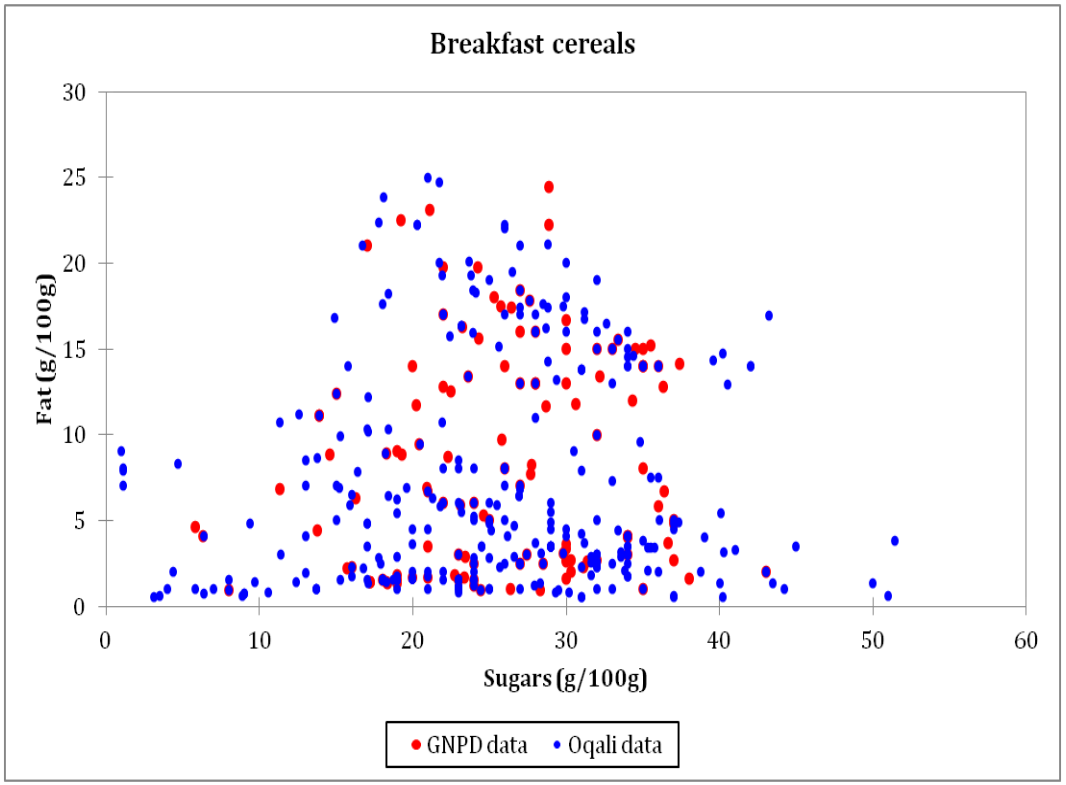
Evolution of sodium contents for 49 items of light cereals



=> Lining up of sodium contents around 0.4g/100g

New products and innovations

Breakfast cereals



Innovative products have fat contents higher than the current supply

- More innovative products in the fattiest categories
- But fat contents are significantly lower for innovative products in these categories

2008-2011: new products and implicit reformulation focused on the lowest quality food categories within the breakfast cereal sector

Fruit purees, compotes, and desserts

Fruit purees, compotes and desserts

Sugar content

Products categories	Characteristics
Fruit compotes	Sugar content > 24g/100g
Fruit desserts	Sugar content between fruit compotes and light fruit compotes
Light fruit compotes	Reduction in sugar content is at least 30% compared to a fruit compote
Fruit compotes with particular ingredients	Particular ingredients such as juice, milk, cereals, flavours
Fruit compotes with particular ingredients and no added sugar	Particular ingredients such as juice, milk, cereals, flavours and with no added sugar
Fruit purees	With no added sugar

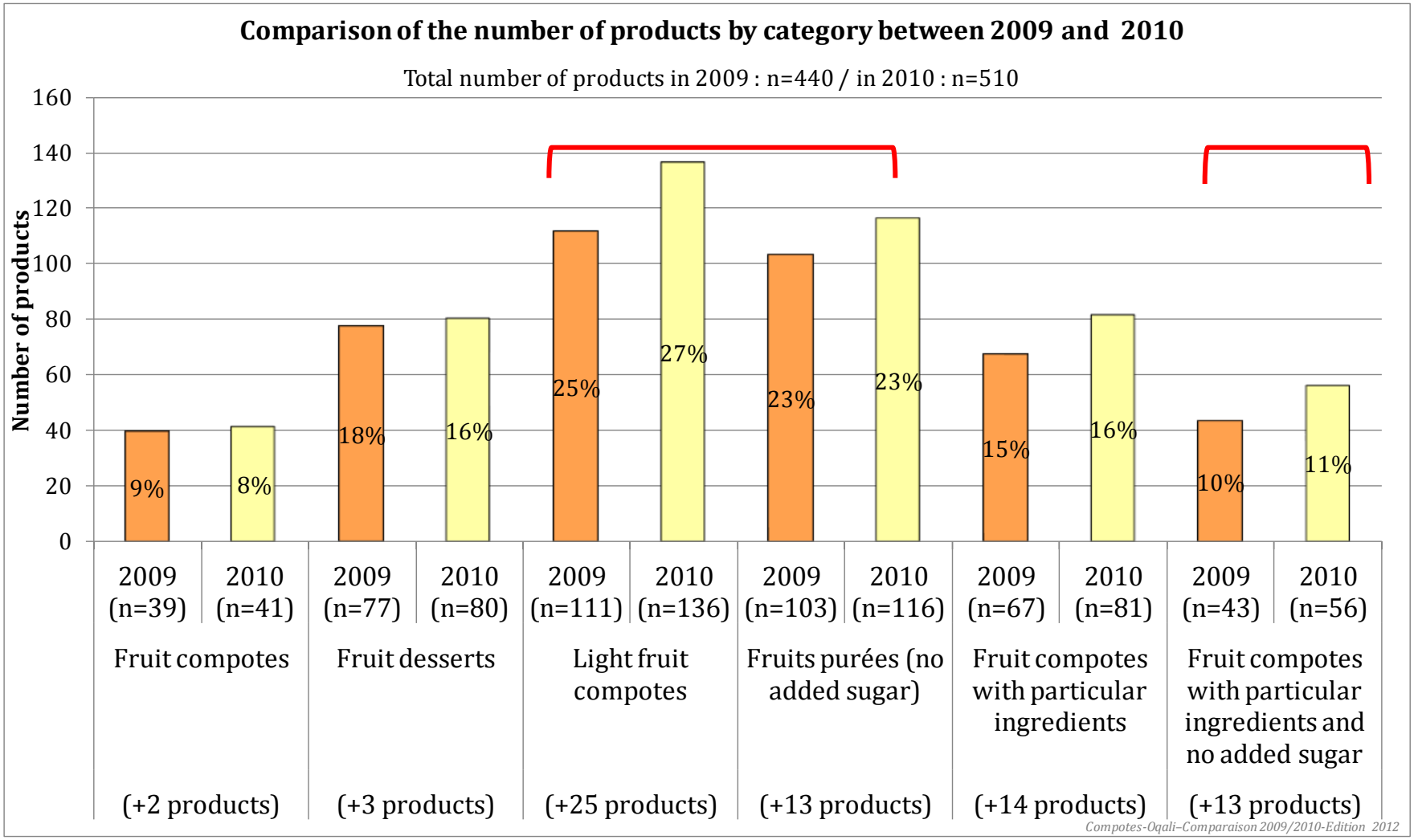
2009 Oqali study

- 440 products collected
- 70% market share

2010 Oqali study

- 510 products
- 78% market share

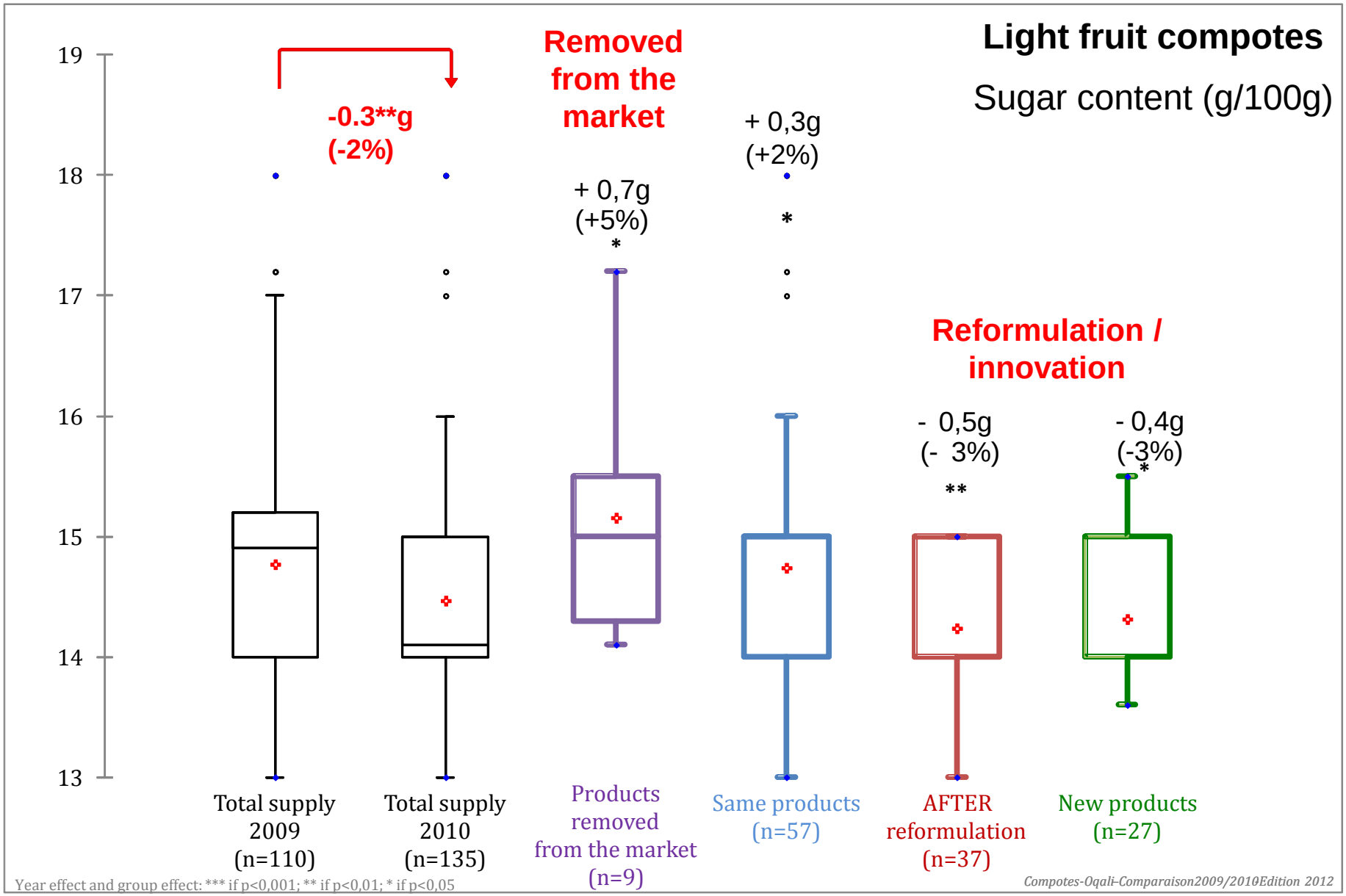
Fruit purees, compotes and desserts



Increased proportion of less sweetened products categories between 2009 and 2010

(light fruit compotes, fruit purées with no added sugar and fruit compotes with particular ingredients and no added sugar) **: from 58% to 61%**

Fruit purees, compotes and desserts



Year effect and group effect: *** if p<0,001; ** if p<0,01; * if p<0,05

Compotes-Oqali-Comparaison2009/2010Edition 2012

Fruit purees, compotes and desserts

- **Food supply evolution**
  - Increased proportion of less sweetened products categories

- **Nutritional composition** : sugar content decreased in light fruit compotes

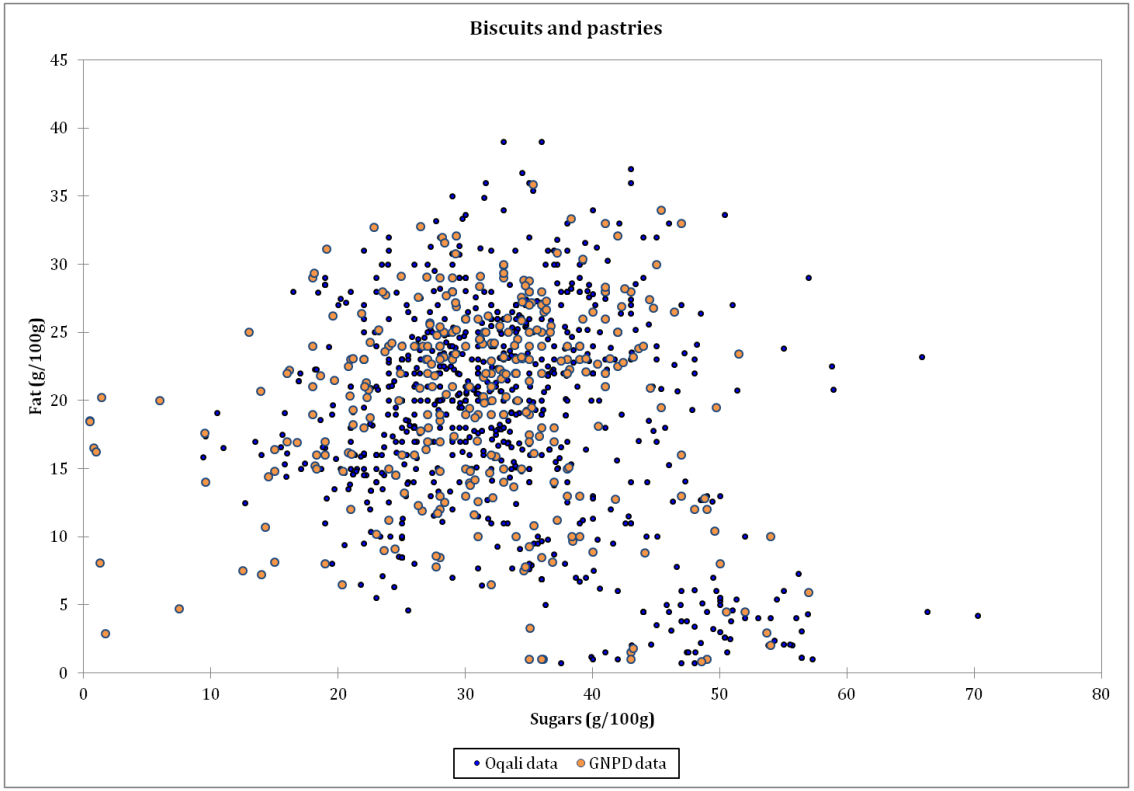
  - Partly due to the modification of the regulation n°1924/2006: to get the “reduced” claim, the sugar content of a product must be now -30% instead of -25%

  - Many of the most sugared products have been removed whereas less sugared products appeared

Other examples

New products and innovations

Biscuits and pastries



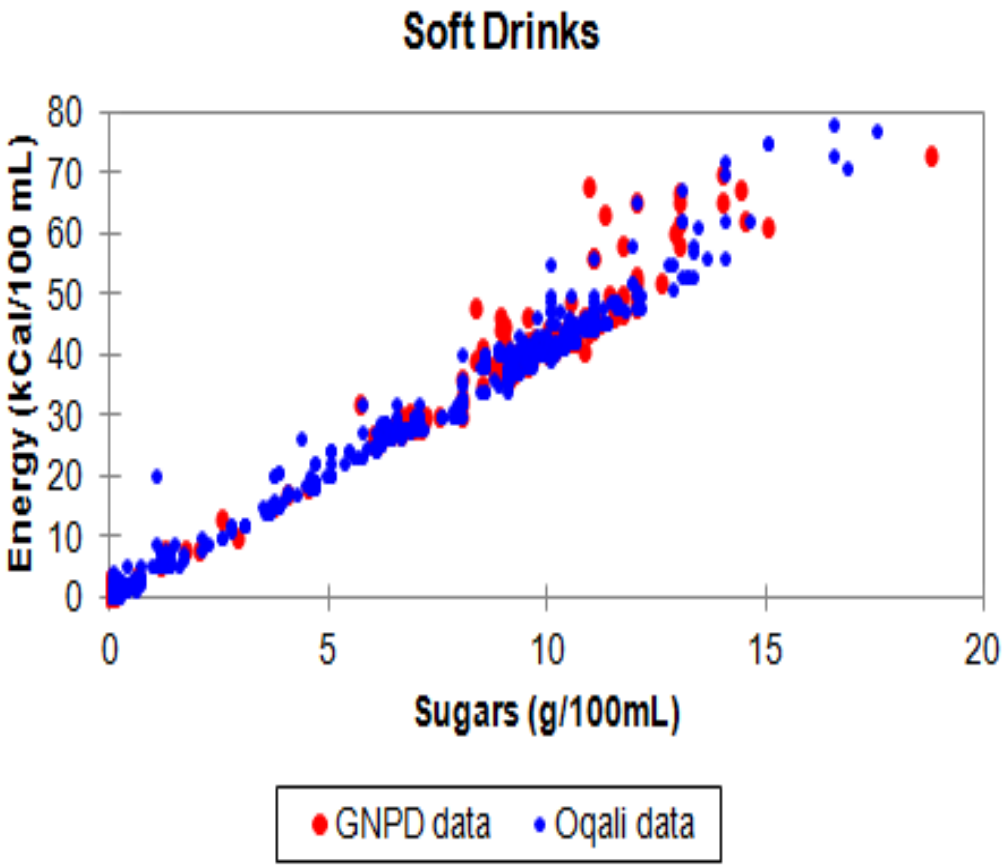
Innovative products have sugars contents lower than the current supply

- More new products in the highest quality categories
- Less new products in the fattiest and most sweetened categories

New products are not better than the current supply in each food category

New products and innovations

Soft Drinks



Innovative products have sugars contents higher than the current supply

- More new products in the most sweetened categories

- New products have sugars contents significantly higher than the current supply in each food category

1. Product reformulation and innovations in several sectors

2. Assessment of individual and collective voluntary commitments (« PNNS 2» Charts)

15 voluntary agreements in 2010 → 30 in 2012

Food producers: individual commitments	Marie	Saint-Hubert	Orangina Schweppes
	Créolailles	MerAlliance	Unilever France
	Taillefine	Bleu Blanc Coeur	Paul
	Findus	Maggi	Herta
	Davigel	P'tit Louis	Lesieur
	Mac Cain	Fleury Michon	Henaff
	Cereal Partners France	Kellogg's	Kiri
	Thiriet	Uncle Ben's	
	Nestlé (baby foods)	Mars Chocolat France	
Food producers: collective commitments	Canned fruits (FIAC- Adepale)	Fruits juices and nectars (Unijus)	Delicatessen meat (FICT)
Retailers	Casino	Scamark	

The example of Kellogg's commitment

Commitments on nutrition quality

1. To decrease by 3.8% to 15% the sugars contents of Miel Pops, Coco Pops, Chocos and Special K by 2014 (mean decrease: -9%)

2. To decrease by 11% to 43% the sodium contents of Kellogg's breakfast cereals and to establish an upper limit in sodium (400mg/100g) by 2014 (mean decrease: -15.8%)

3. To increase by 20% to 200% the fibre contents of Miel Pops, Coco Pops, Chocos and Special K by 2014 (mean increase: +25.6%)

Other commitments:

To inform consumers about nutrition
To have a responsible communication

To teach nutrition to employees
To be part of a public health program

The example of the Deli Meat Sector (collective) commitment

Impacted product categories:

- Superior quality ham
- Sausage (Strasbourg sausage, Frankfurter…)
- Country style pâté
- Pâté or mousse made with pork liver
- Potted meat
- Dry pork sausage
- Superior quality dried sausage
- Ham (Serrano ham, Bayonne ham…)
- Bacon strip

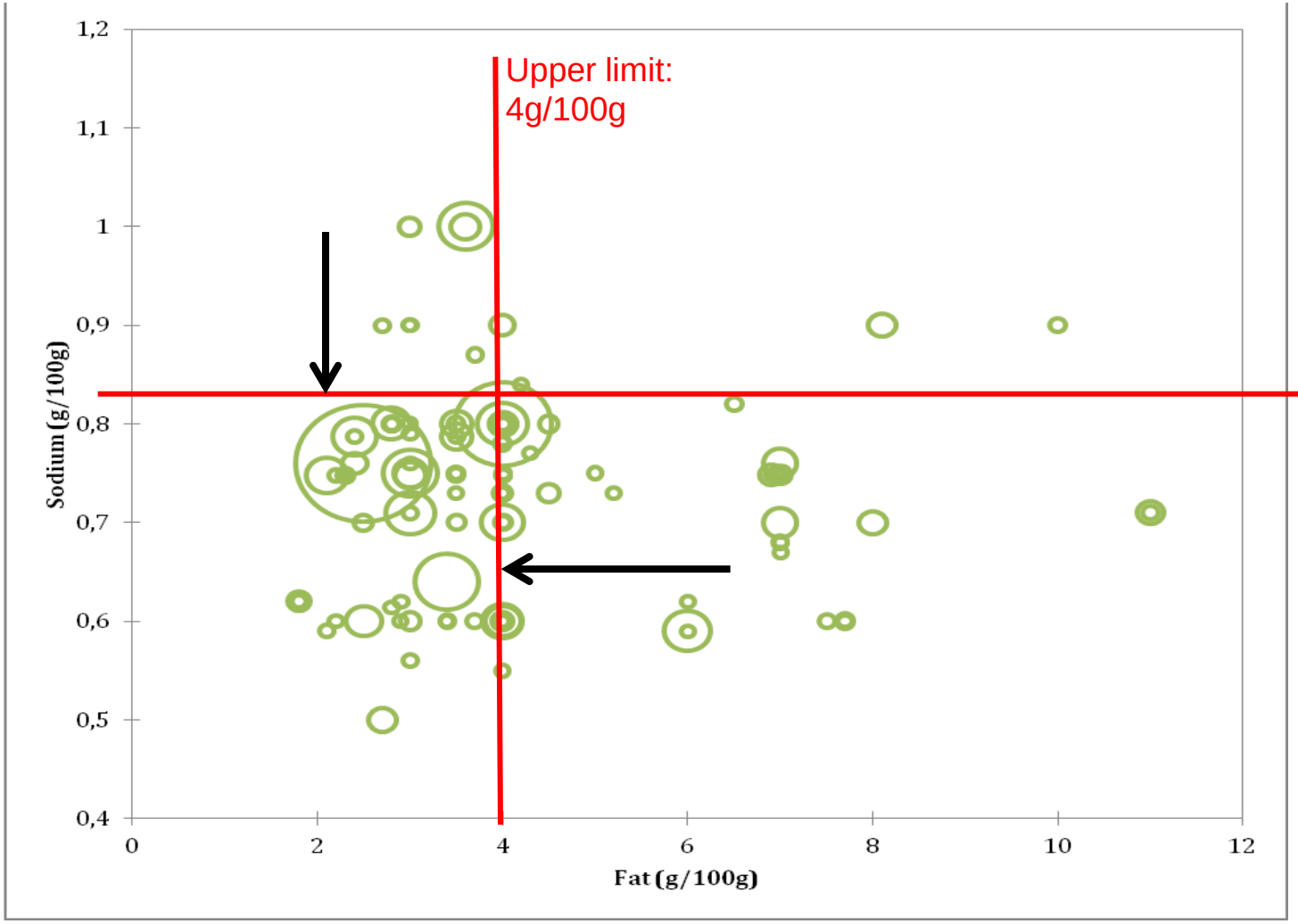
- **Sodium contents:**

• Decrease by 5% the mean sodium content of the main categories
• Impose an upper limit in sodium content **to impact the saltiest products**

- **Fat contents**:

• Decrease by 5% the mean fat content of the main categories
• Impose an upper limit in fat content **to impact the fattiest products**

Commitments in the superior quality ham category (2010-2013)



Potential impact of voluntary agreements on nutrient intakes

Contribution to the achievement of the objectives set by French government

		MEN	WOMEN
Nutrient	**Objectives (PNNS2)**	**Achievement rate of the objective**	**Achievement rate of the objective**
Salt	**< 8g/day**	**3% to 5% of the objective is achieved**[1]	**initially achieved** or **14% of the objective**[1]
Sugars	**25% decrease of added sugars consumption**	**1,6%** of the objective is achieved[2]	**1,6%** of the objective is achieved[2]
Lipids	**less than 35% of the total energy intake**	**28%** of the objective is achieved	**5%** of the objective is achieved

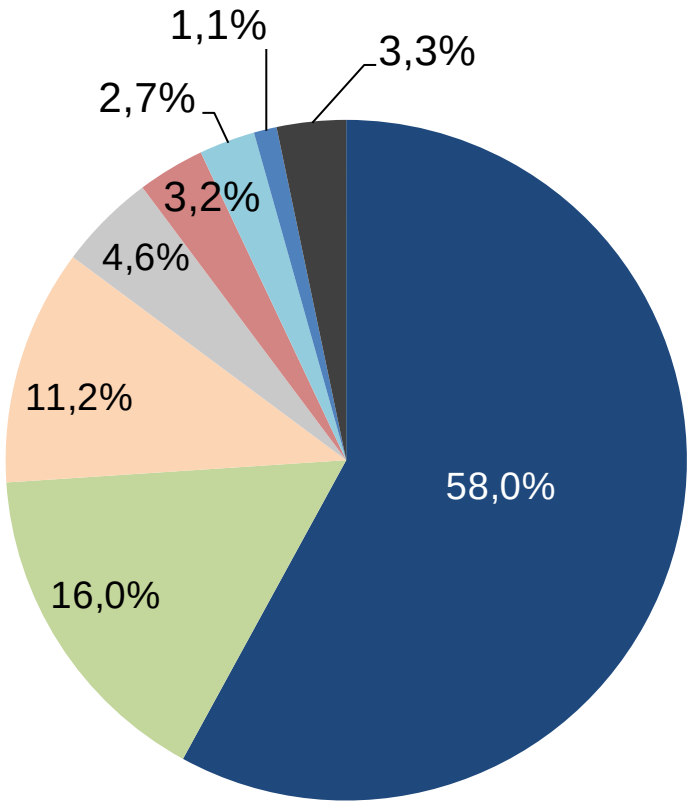
[1] 1 to 2g/day of added salt

[2] The rate is underestimated because the objective is only on added sugars

Impact of reformulation agreements on nutrient intakes

Men - Adults

Sodium - Food group contribution to the improvement of average daily intake (mg/day)



- Delicatessen meats (-21,1mg/day either 58,0%)
- Bread and crispbread (-5,8mg/day either 16,0%)
- Ready meals (-4,1mg/day either 11,2%)
- Pizzas, quiches and savoury pastries (-1,7mg/day either 4,6%)
- Soups (-1,2mg/day either 3,2%)
- Breakfast cereals (-1,0mg/day either 2,7%)
- Potatoes (-0,4mg/day either 1,1%)
- 11 other food groups (-1,2mg/day either 3,3%)

Oqali - Edition 2012

- All processed food groups are concerned by at least one commitment

- Average energy intake : - 11.4kcal/day (-0,4%) for men and -10.6kcal/day (-0.6%) for women

- Evolution of the average daily intakes
  - Sugars : -0.4% for men and women
  - Sodium : -1.1% for men and -0.9% for women
  - Lipids : -0.4% for men and -0.3% for women
  - Saturated fatty acids : -0.1% for men and -0.2% for women

- Reformulations agreements contribute to achieve the objectives set by the French government

- Significant commitments by firms committed in Charts…

…. but modest total impacts on intakes due to still small market shares and small number of firms involved in these commitments (up to now)

Conclusion (1/2)

• The improvement of nutritional quality of foods is in progress, and implemented by all the types of brands

• It depends on the food sectors and is mainly focused on some critical nutrients/food categories

• It is mainly implemented through “implicit” rather “explicit” reformulation

• The launching of innovative products is not necessarily used to improve the nutritional quality of the food supply. It depends on the regulatory constraints (fruit puree and compotes) and likely on the willingness-to-accept less fatty/salted/sweet products by the consumers

• In some cases, new products are launched to improve the product quality of low quality food categories (to promote substitutions within food categories) and in other cases, new products are launched to increase the supply in higher quality food categories (to promote substitutions between food categories)

• In all cases, the changes and their impacts on nutrient intakes are still modest

Conclusion (2/2)

• Because of the taste/health trade-off, there is not necessarily higher consumers' willingness-to-pay for reformulated products (and then, weak market incentives)

• Public supports may facilitate the evolution through :

(1) The promotion of individual and collective voluntary agreements :

Significant effects if several market leaders were involved and/or with collective agreements

(2) The implementation of tools (like OQALI) designed to follow the evolution of food quality at the brand level, and used for:

- the food industry benchmarking
- defining relevant reformulation goals at the food sector level
- following the realization of the individual and collective voluntary agreements

Thank you for your attention