

# Oqali

Observatoire de la qualité de l'alimentation

# French Observatory of Food Quality

EuroFIR Congress – Vienna – September 8<sup>th</sup> - 10<sup>th</sup> 2009

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- Packaging-related data

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## Background

- Set up in February 2008 by the Ministries in charge of Agriculture, Health and Consumer Affairs
- Created as part of the French National Nutrition and Health Programme 2006-2010 (PNNS 2), a nutrition-based programme aimed at improving public health
- Financed and supervised by the 3 Ministries
- Implementation entrusted to **INRA** (French National Institute for Agronomic Research) and **Afssa** (French Food Safety Agency)

## Aims

### PRIMARY GOAL

⇒ to monitor the global changes in the food supply by measuring differences and trends in the nutrient content of processed and packaged foodstuffs in relation to economic parameters in the French market

### ADDITIONAL AIM

⇒ to provide tools to assess the effectiveness of the actions engaged by the food chain to improve nutritional quality

- The Observatory collaborates with manufacturers and retailers in the food chain
- This partnership facilitates the collection of information and is of key importance for the validation of the methods used to aggregate and analyse the data



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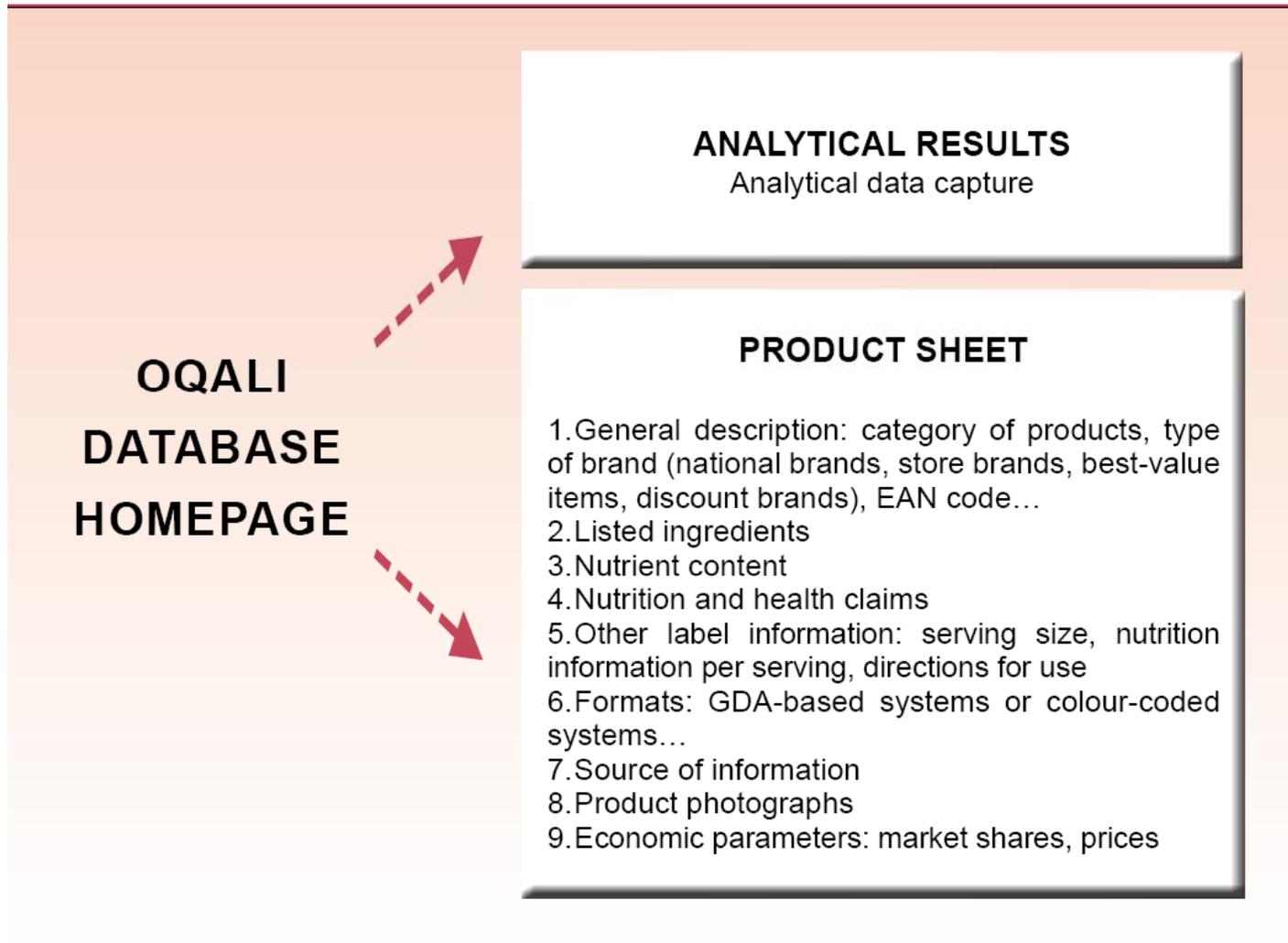
## 5. Conclusions and perspectives

## Sources of information

- Several **sources** of information are used:
  - Packaging
  - Manufacturers and retailers information
  - Nutrient analysis, when information is missing
  - Surveys and panels data on French food consumption and food purchases (economic parameters)



# Oqali database scheme



# Data available

2008	Breakfast cereals	Sweet biscuits	Fresh dairy products
Data available (number of products)	355	1118	707
Categories of products (number)	10	27	7
Market coverage (according to TNS Worldpanel data on French household purchases)	75.5% (TNS 2008)	44.6% (TNS 2008)	80% for each food product studied (TNS 2004)
Studies	Nutrient content: nutrition information on labels Purchasing data Food labelling	Nutrient content: nutrition information on labels Purchasing data Food labelling	Nutrient content: nutrition information on labels, analytical data and comparison between them Food labelling
Retrospective data (number of products)	153	269	-



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## Methods

For each category and type of brand, Oqali has analyzed all the collected information to describe products characteristics:

- Nutritional values have been cross-referenced with economic data provided by consumer panels
  - ⇒ *Kruskal-Wallis test, boxplots, twoway scatters and multivariate statistics*
- Packaging related-data was also analyzed

The anonymity of collected data is always preserved

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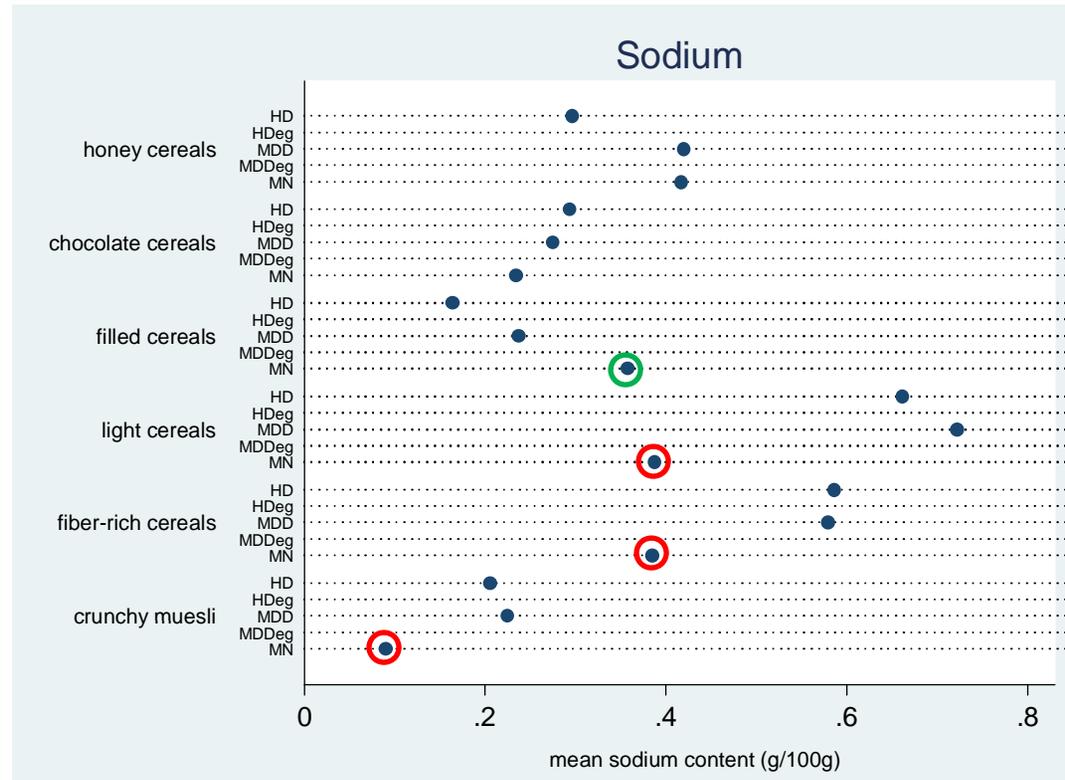
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## MAIN RESULTS

# Kruskal-Wallis test: mean sodium content comparison per type of brand



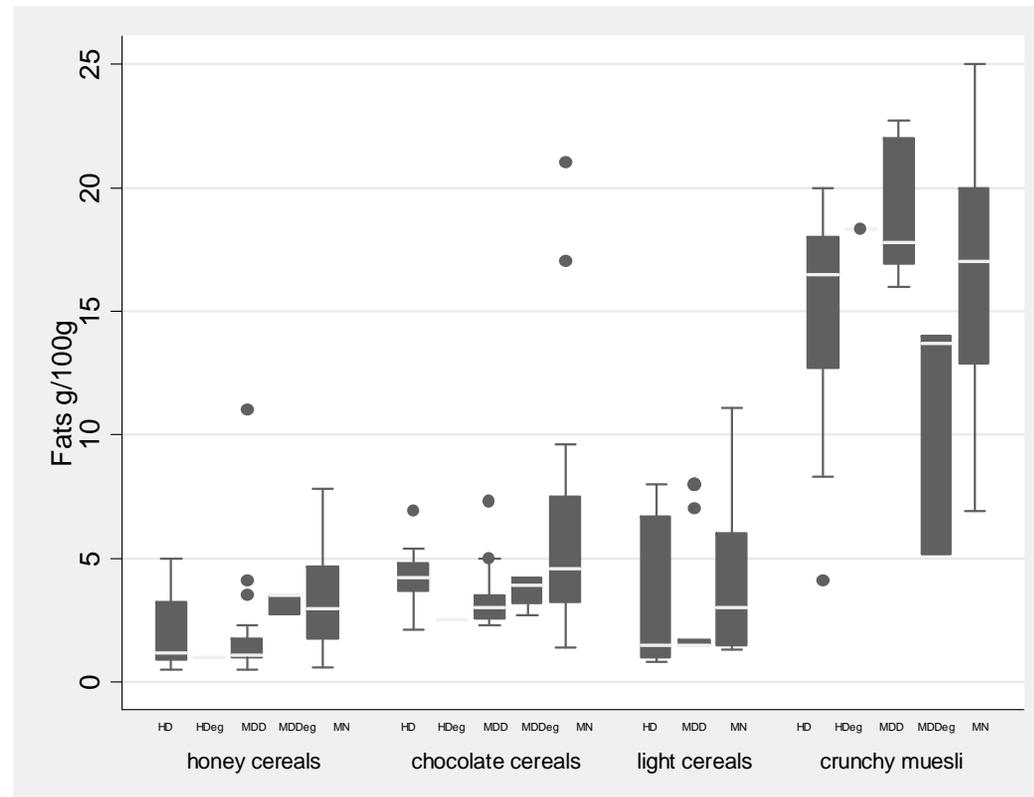
MN: national brands; MDD: retailer brands; MDDeg: retailer brands (low-price products); HD: discount brands; HDeg: discount brands (low-price products)

### National brands:

- mean sodium content significantly lower than other types of brand for 4 product categories
- mean sodium content significantly higher than other types of brand for filled cereals

Breakfast cereals

## Boxplots per type of brand: fats content

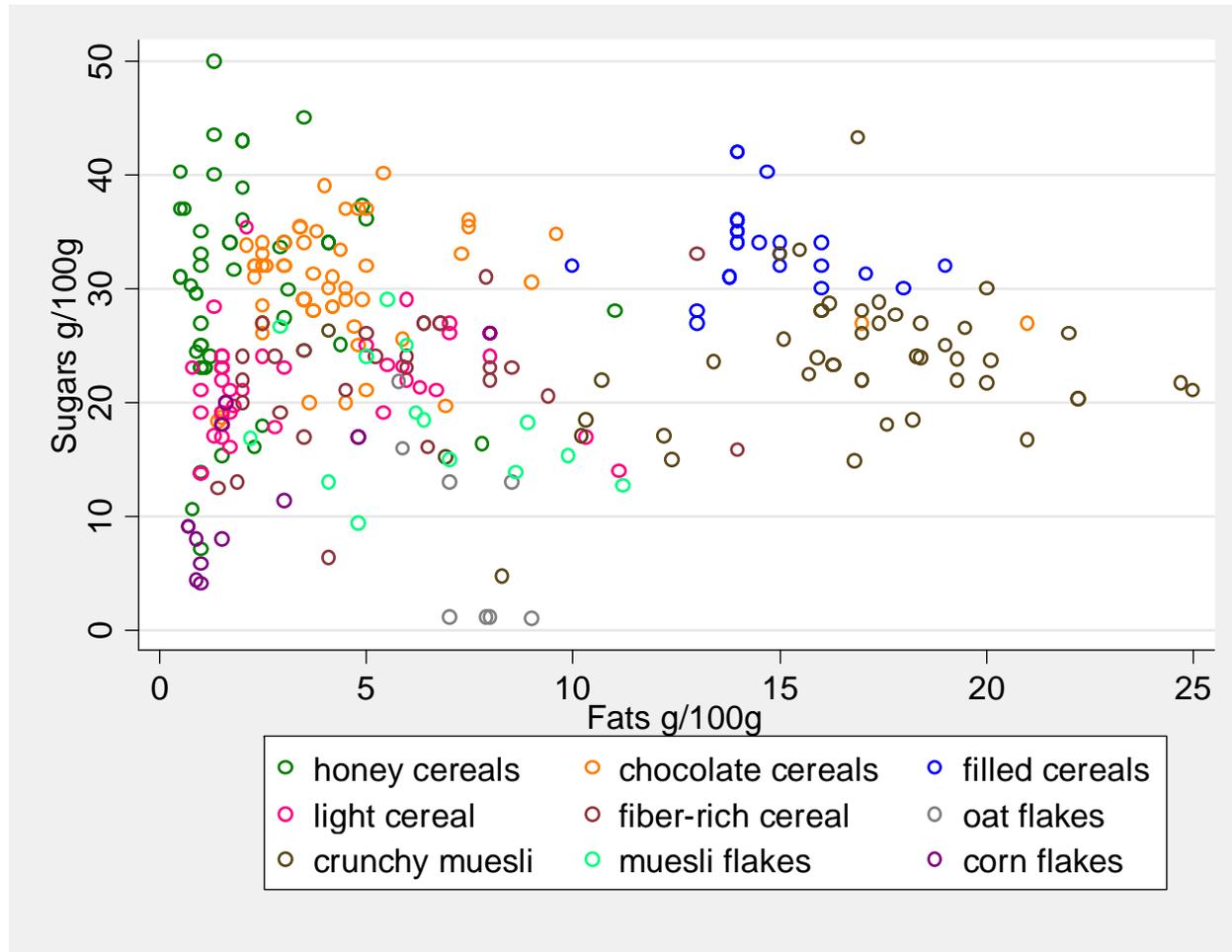


MN: national brands; MDD: retailer brands; MDDeg: retailer brands (low-price products); HD: discount brands; HDeg: discount brands (low-price products)

Differences of nutrient content between types of brands are not systematic

Breakfast cereals

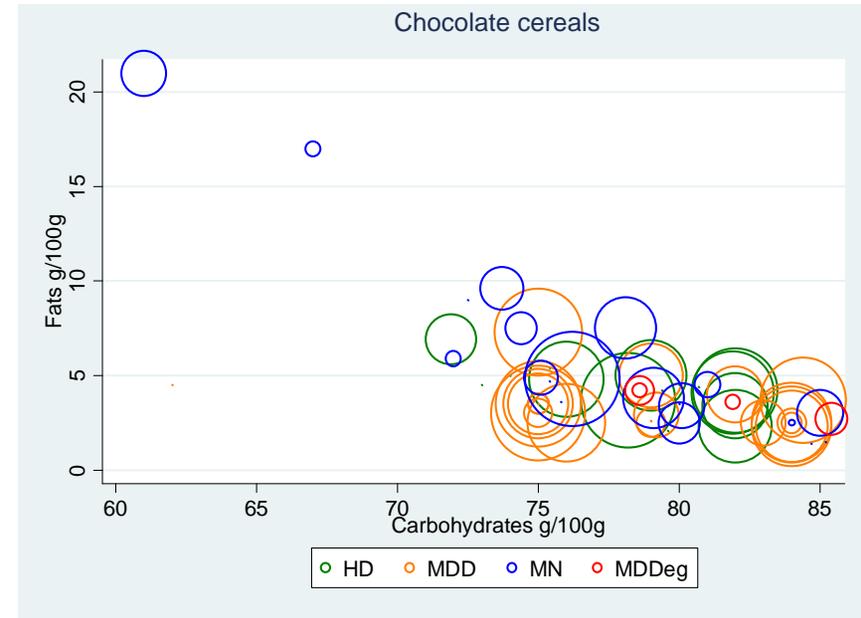
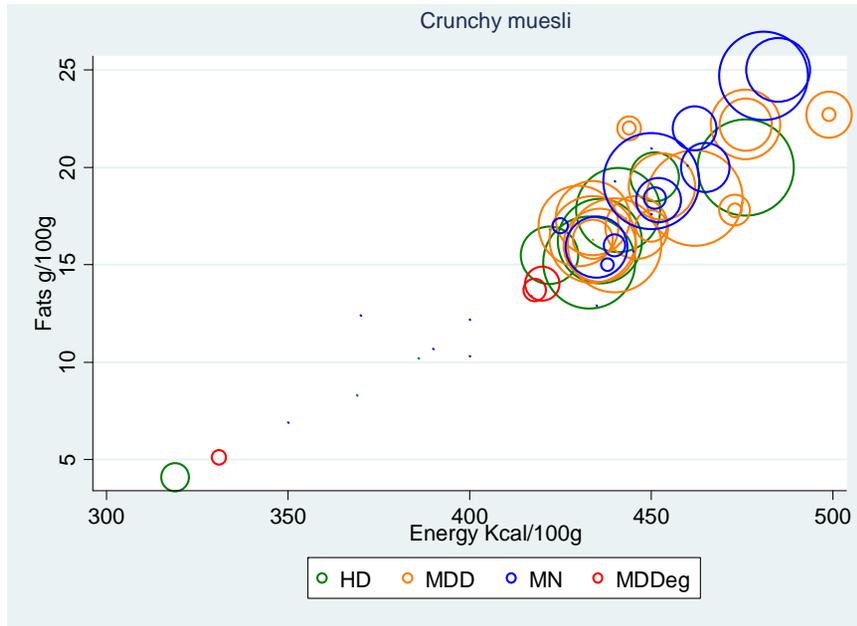
## Twoway scatters: fats/sugars



Nutrient content mainly differs according to categories of products

*Breakfast cereals*

# Twoway scatter (weighted by market share)



MN: national brands; MDD: retailer brands; MDDeg: retailer brands (low-price products); HD: discount brands; HDeg: discount brands (low-price products)

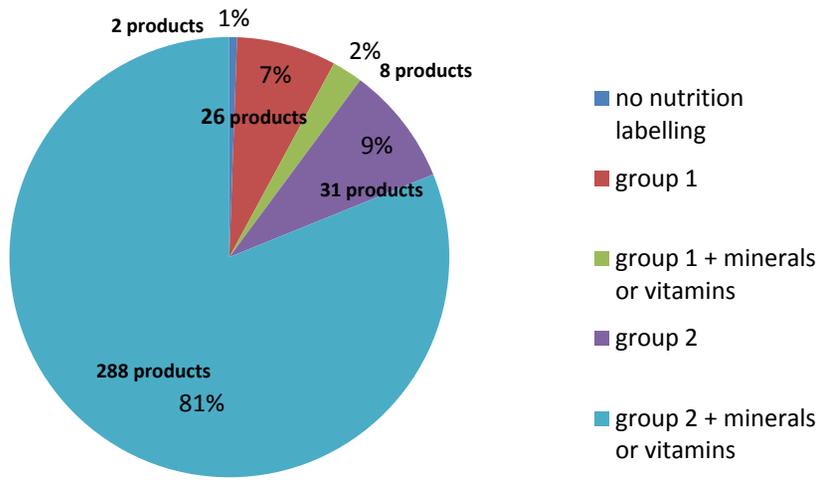
Correlation between energy and fats for crunchy cereals

Substitution between fats and carbohydrates for chocolate cereals

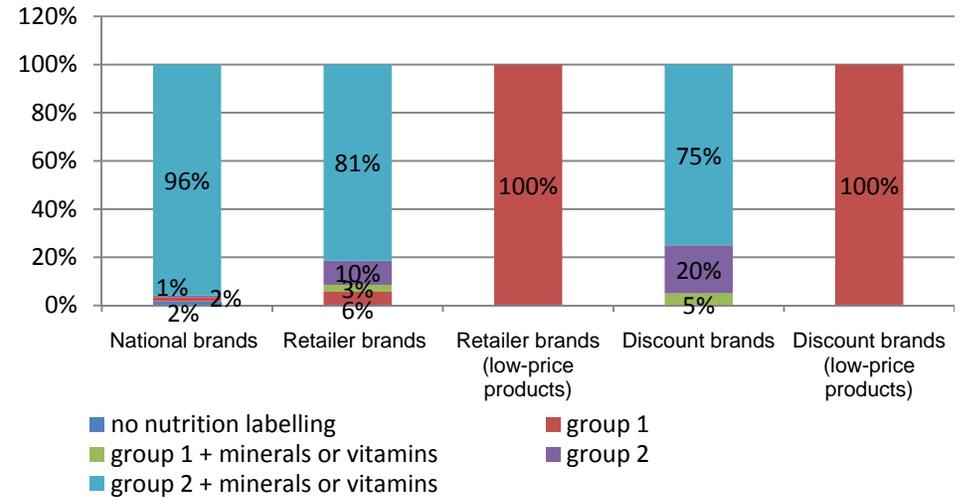
Breakfast cereals

# Nutritional label

Nutritional label dispersion



Nutritional label per type of brand



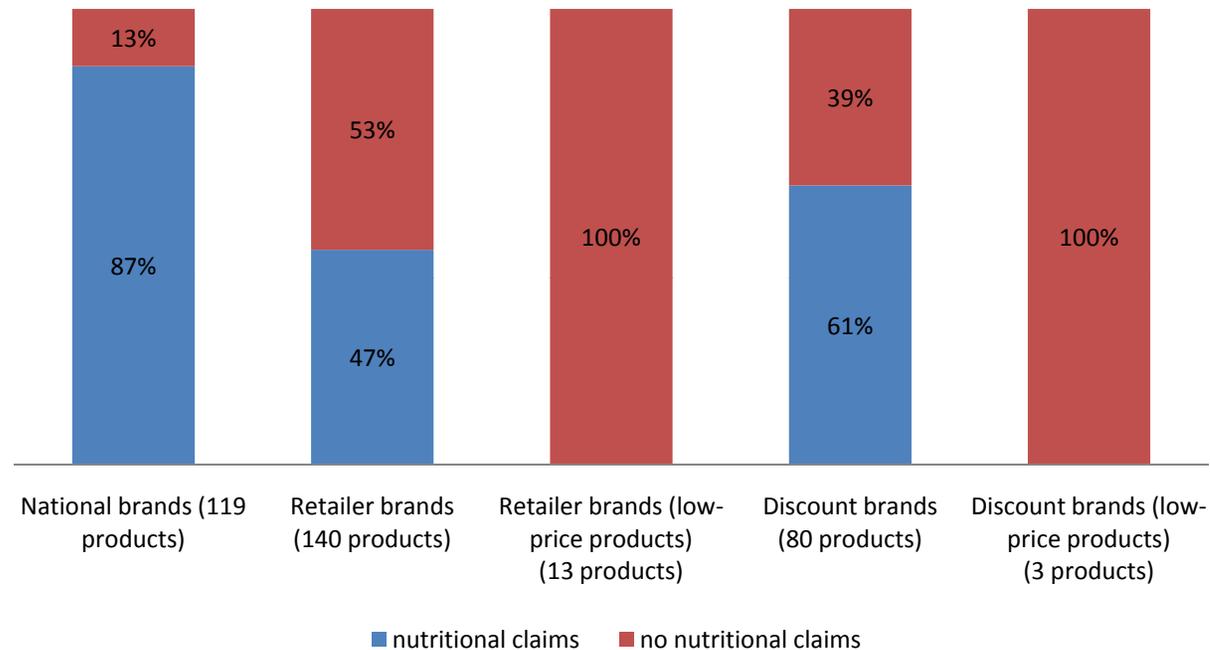
- 99% of products have a nutritional label
- More than 80% provide a nutritional label of group 2 including other substances (vitamins, minerals, ...)

Nutritional information available on packaging is less complete for low-price products (retailer and discount brands)

*Breakfast cereals*

## Nutritional claims per type of brand

62% of products have a nutritional claim



Whereof:

- 87% of national brands products
- 61% of discount brands products
- 47% of retailer brands products

*Breakfast cereals*



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## Conclusions

In the **product groups** studied

- ⇒ Differences in the nutritional composition are essentially related to the classification into categories

Within a **category of products**

- ⇒ Differences in the nutritional composition depend on the type of brand  
However, these are isolated differences (related to a small number of products) and should not be considered as systematic (the type of brand classification according to the average nutrient content differs from one category to another)

Nutritional information available on packaging is less complete for best-value items

Oqali has published different reports presenting the main results (available online [www.oqali.fr](http://www.oqali.fr))

## Perspectives

The results published by Oqali are an essential tool to meet public health challenges and consumer expectations on nutritional information

This approach is continuously expanded to include additional product groups:

- pre-packed meat products
- jams, stewed and canned fruits
- juices and soft drinks
- chocolate and chocolate-based products
- prepared meals (chilled, frozen and canned)
- crackers and cocktail biscuits
- bread-based products