



Socioeconomic disparities and nutritional quality of food purchases in France: 40 years of household purchases 1969-2010

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Reference

204006

Title: **Socioeconomic disparities and nutritional quality of food purchases in France 1971-2010**

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Background and Objectives:

- The evidence of a social gradient in health and food-related diseases shows the crucial role of nutritional quality of diet. However socioeconomic disparities in diet quality were seldom studied on the long-term.
- Our aim was to analyze the evolution of the nutritional quality of food purchases of French households (1971-2010) and to assess the disparities in nutritional quality according to income and education.

Methods:

•**Data:** Household purchases, Food-at-Home, Representative population; **1971-1991: INSEE**, food surveys, 7days diary; **1991-2010: Kantar** panel surveys, scanner data; Food composition database: CIQUAL 1992 (30 components, 800 foods)

•**Methodology:** Building time series of average quantities/cap of food purchases, yearly, Converted into calories and nutrients; Assessing the evolution of the nutritional quality of food purchases, using the Mean Adequacy Ratio (MAR: mean percentage of daily recommended intakes for 16 key nutrients, per 2000kcal of food purchases; Computing deviations according to household income per uc quartiles (Q1 to Q4) and 4 levels of education (L1 to L4) along 5 points in time 1971-2010:

$$\Delta_z = \left(\frac{\bar{m}_z - \bar{m}}{\bar{m}} \right) * 100$$

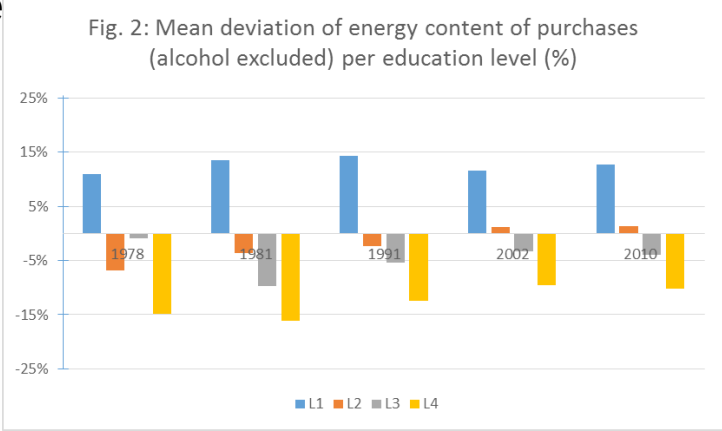
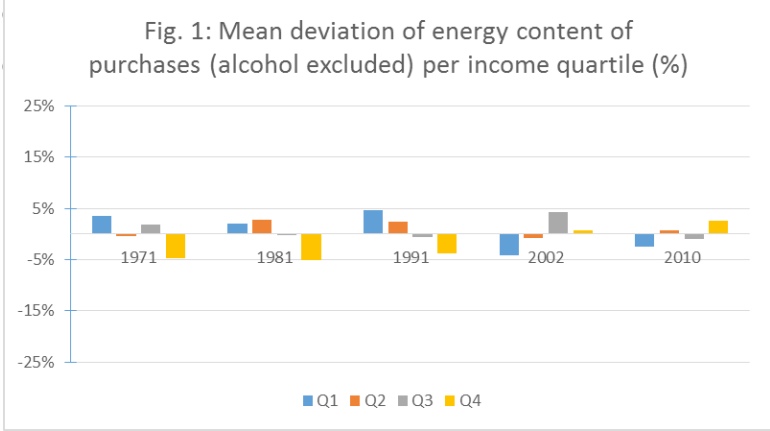
Descriptive statistics (source: INSEE, Kantar)

| Year | 1971 | 1978 | 1981 | 1991 | 2002 | 2010 |
|---------------------------|-------|-------|-------|-------|-------|--------|
| Energy content (kcal/day) | 2115 | 2043 | 1955 | 1754 | 2062 | 2222 |
| MAR (%) | 71.2 | 76.1 | 77.5 | 80.5 | 80.6 | 82.8 |
| N households | 8,047 | 7,934 | 8,406 | 6,353 | 5,347 | 11,344 |

Results:

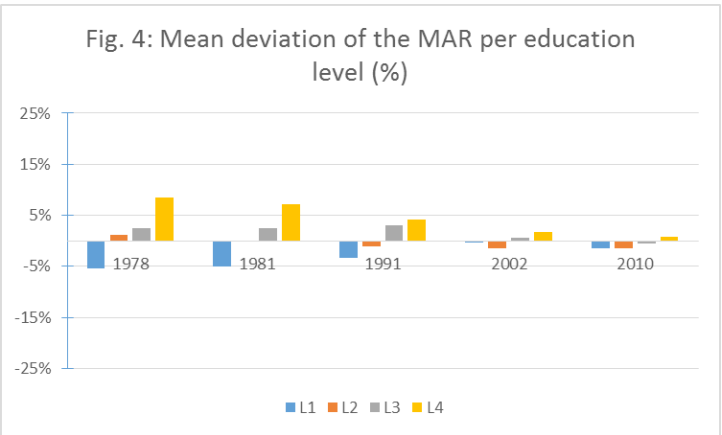
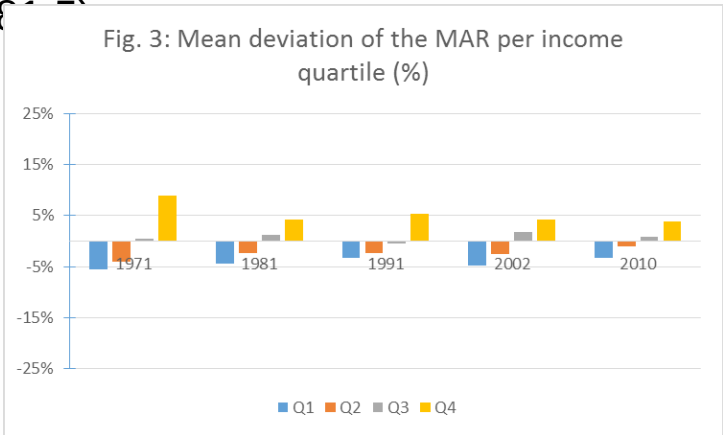
- **Evolution of energy content of FAH: higher disparities according to education than to income**

Higher energy content of FAH for lower income until 1991 and reverse trend from 2002, with variations according to education level. For education level, higher energy content of purchases for lower education level until 1991 and reverse trend from 2002, with variations according to income quartile.



- **Evolution of MAR: Lower MAR for lower income and lower education**

The MAR remained always higher for the richest quartile (75.3 to 86.0) than for the lowest one (66.4 to 80.1). Regarding education (1978-2010), we found a higher MAR for higher education level than for lower one (82.5 vs 71.9) but with a smaller gap at the end of the period (83.5 vs 81.5).



Conclusions:

- On the whole the nutritional quality of purchases for FAH, as measured by the MAR, remains lower for the lower SES (income and education) all over the period 1971-2010.
- Disparities of nutritional quality decreased according to education but remained according to income.

•Main limitation of the study: only one food composition table was used, therefore the evolution in nutritional quality reflects the changes in food purchases patterns (including the introduction of new foods categories until 1992) but not the evolution of the nutrient content of purchased foods.

Conflict of Interest: None