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## Economic background of families - is it vital for food decisions?

## A case study of school milk orders in Germany

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## Background

- milk products are an important part of a balanced diet, especially during childhood
- the EU School Milk Scheme was developed to support milk consumption
$\rightarrow$ subsidy ( 4.4 cents) for 250 ml school milk per pupil and school day
- milk consumption declines steadily
- research project by the BMELV in North Rhine Westphalia, Germany, to quantify influencing factors
- results show that pupils' decision to order school milk depends on individual and contextual factors
$\rightarrow$ The impact of the economic background is analysed in more detail:
"To what extend do influencing factors vary across income groups?"
- three groups of monthly net income per household...
low income: below $2000 €$ (share: $32 \%$ ) middle income: between 2000 and $3000 €$ (share: $40 \%$ )
high income: from $3000 €$ and more
(share: $28 \%$ )
$(1 € \approx 1,3 \$)$


## Method

- observations are nested in identifiable contexts: hierarchical data structure
- logistic multilevel analysis (random-intercept model)
- estimation for each income group

| Selected results for income groups |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Parameter | low | middle | high | ```\(\rightarrow\) dependent variable: binary outcome variable \(=1\) if pupils order school milk \(=0\) if pupils not order``` |
| price (level-1) |  |  |  |  |
| school milk price | -0.41 * | -0.38 * | - |  |
| pupils (level-2) |  |  |  |  |
| reason for (not) drinking school milk: |  |  |  |  |
| milk tastes good | 2.18 *** | 2.29 *** | 2.86 *** |  |
| milk is healthy | 0.36 * | 0.55 ** | 0.76 ** |  |
| positive image of milk (yes=1) | - | 0.54 ** | 0.57 * |  |
| age | -0.26 ** | - | -0.36 ** |  |
| gender ( $\mathrm{girls}=1$ ) | -0.48** | -0.55 *** | -0.48** | ए 2 |
| parents (level-2) |  |  |  |  |
| parents like to drink milk and/or eat milk products | 2.95 ** | - | - |  |
| "I feel good if my child drinks school milk during breaks" |  |  |  |  |
| I agree | 1.02 *** | 1.04 *** | $1.18{ }^{* * *}$ |  |
| I disagree | - | -0.68 ** | - |  |
| "School milk facilitates a sufficient milk supply for children" I agree | 0.36 * | - | - |  |
| class teachers (level-3) |  |  |  |  |
| teacher drinks milk with the pupils during morning break | - | 0.50 * | - |  |

## Conclusion

- income-specific influencing factors, although the expenditure for school milk is negligible
- targeted programs for low-income groups

