

# The regional and inequality manifestations of European household food behaviour: a comparative study of the effects of Covid-19

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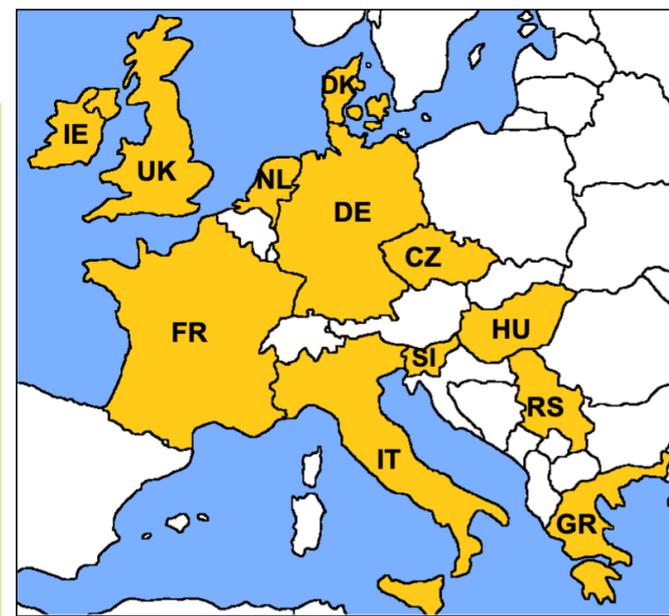
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<https://www.food-covid-19.org>

# Overall objectives, methodology and approach

## Overall objectives

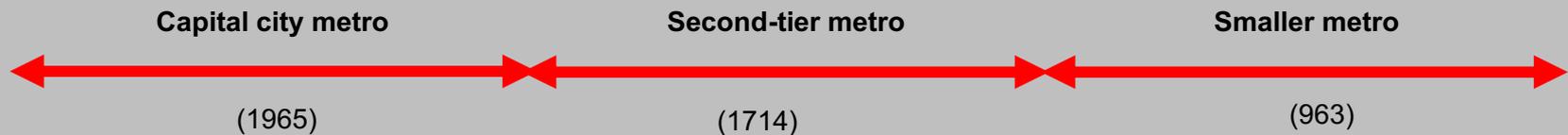
- Examine the regional and inequality manifestations of consumers' food behaviour both before and during Covid's first wave
- Map the impact of the pandemic shock on this behaviour in relation to:
  - Demographics
  - Obtaining food
  - Consuming food
  - Climate consequences
  - Changed behaviour before-during Covid
  - During Covid: income loss, food stress, anxiety & CO2 impacts
  - Preliminary conclusions



## Methodology

- Online European household food behaviour questionnaire (March-July 2020): about 10,000 valid responses
- Focus on 12 countries with >150 valid responses, using mix of market surveys & snowballing

### METROPOLITAN HIERARCHY (Eurostat: functional urban areas with at least 250,000 pop: sample available 4642)

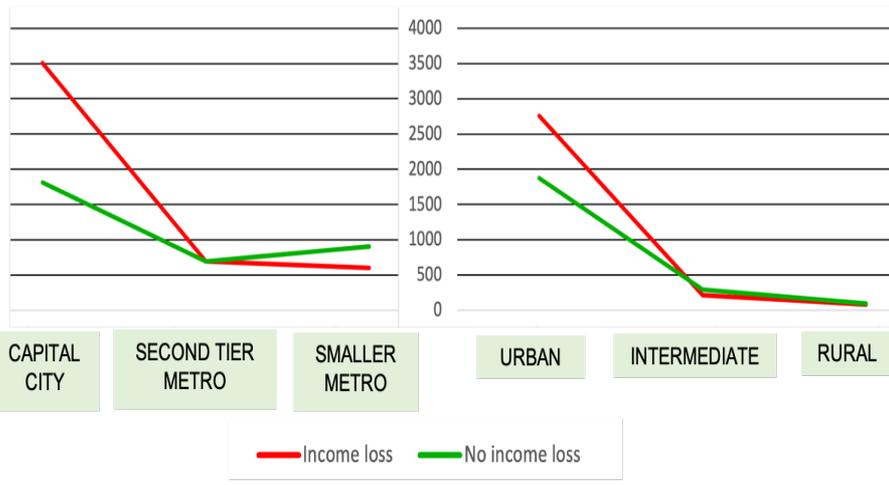


### URBAN-RURAL CONTINUUM (Eurostat: urban clusters with at least 300 pop / km2: sample available 8031)

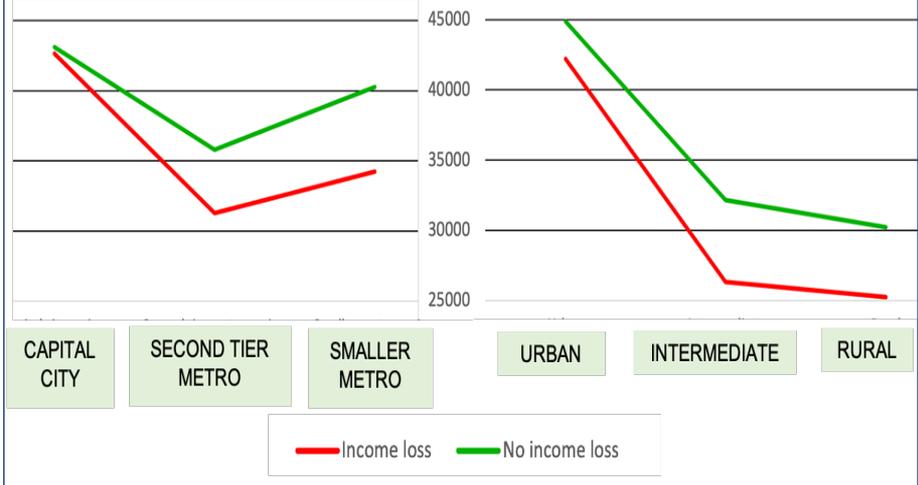


# Some demographics

### Mean population density / km2



### Mean PPP/inhabitant (Euros per annum)



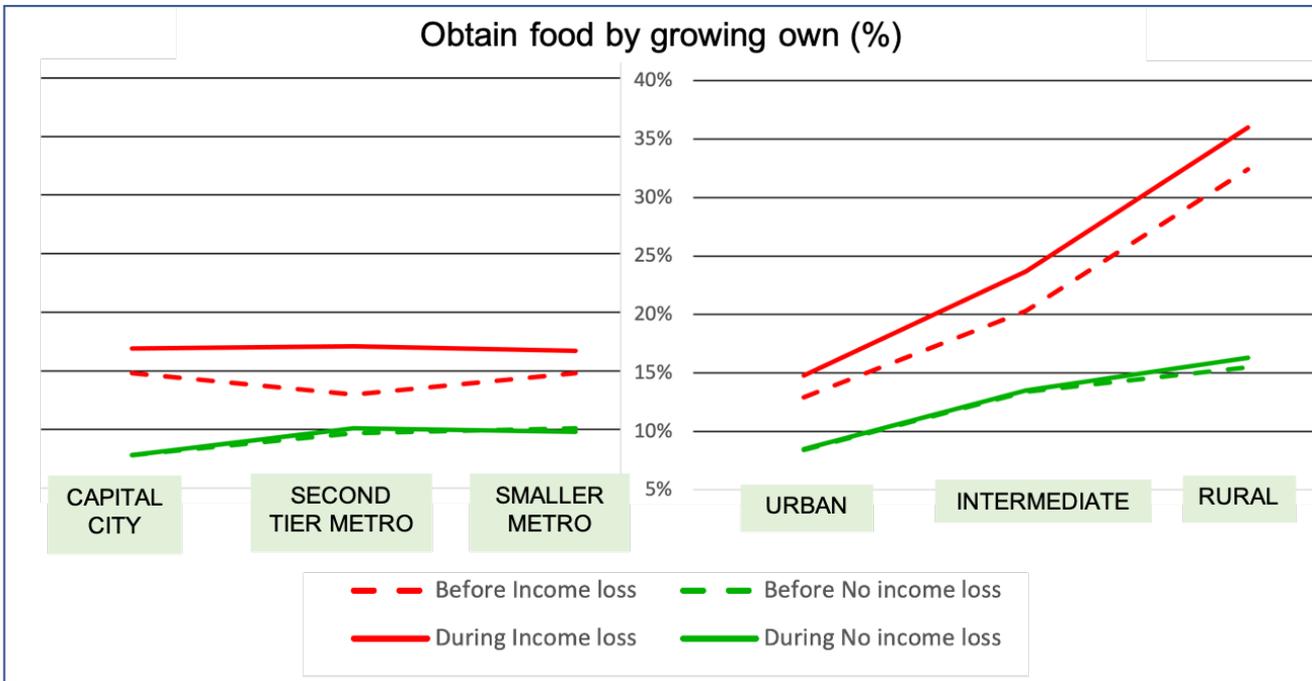
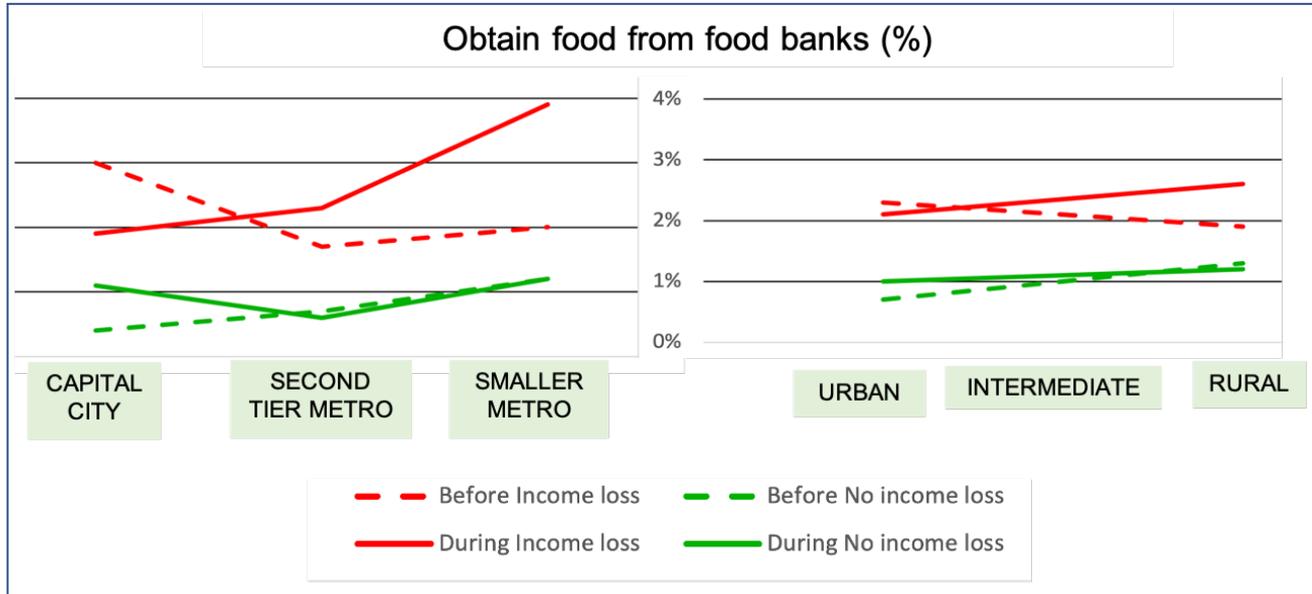
### Mean age



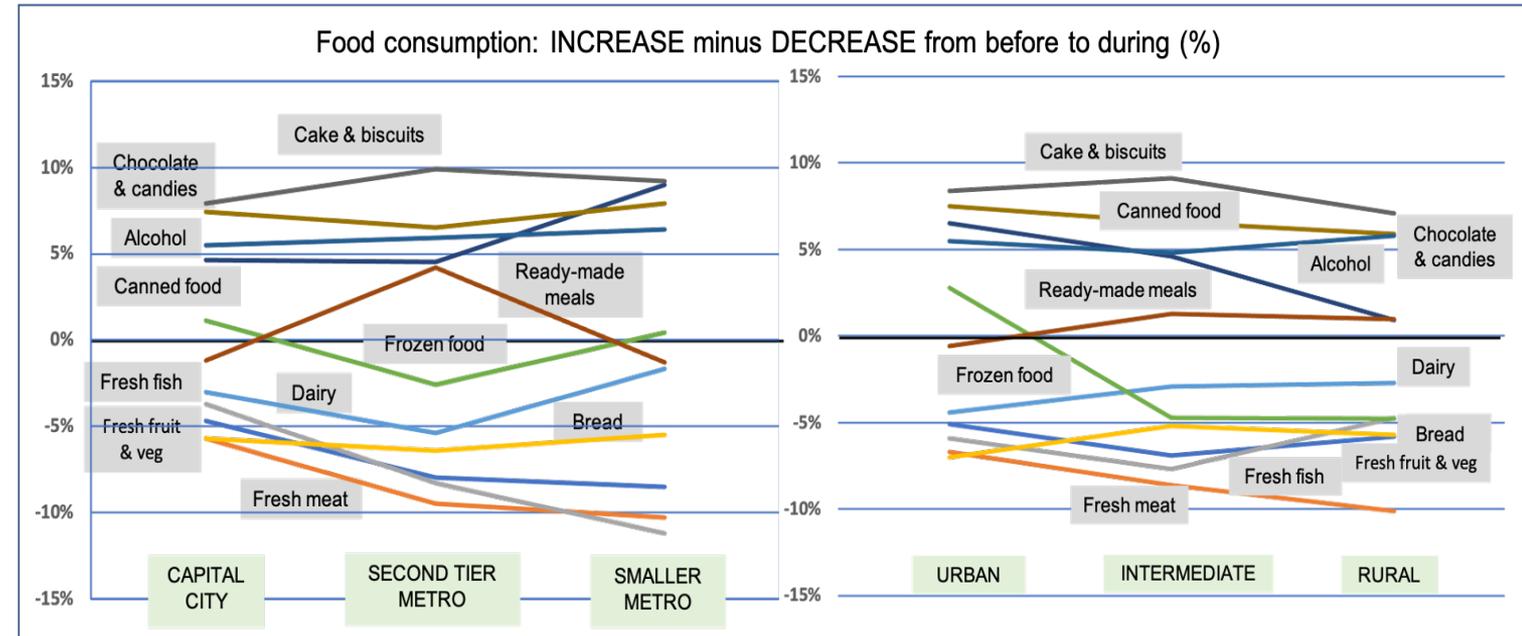
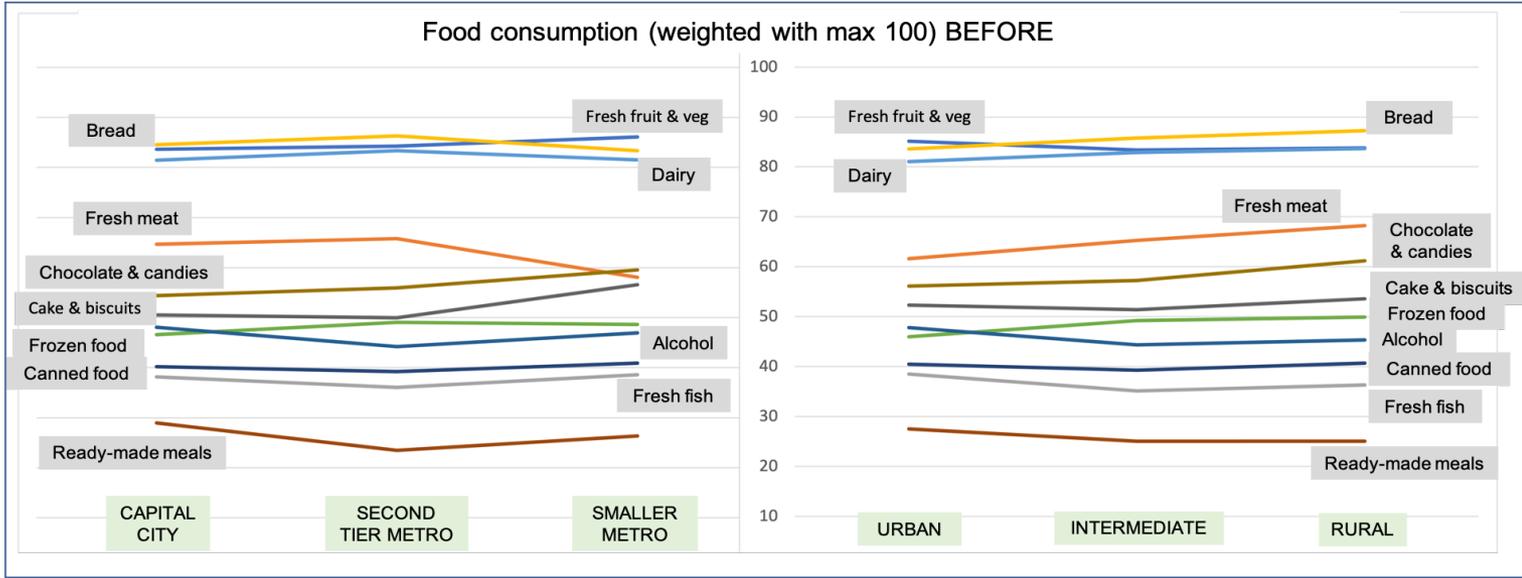
### Mean household size



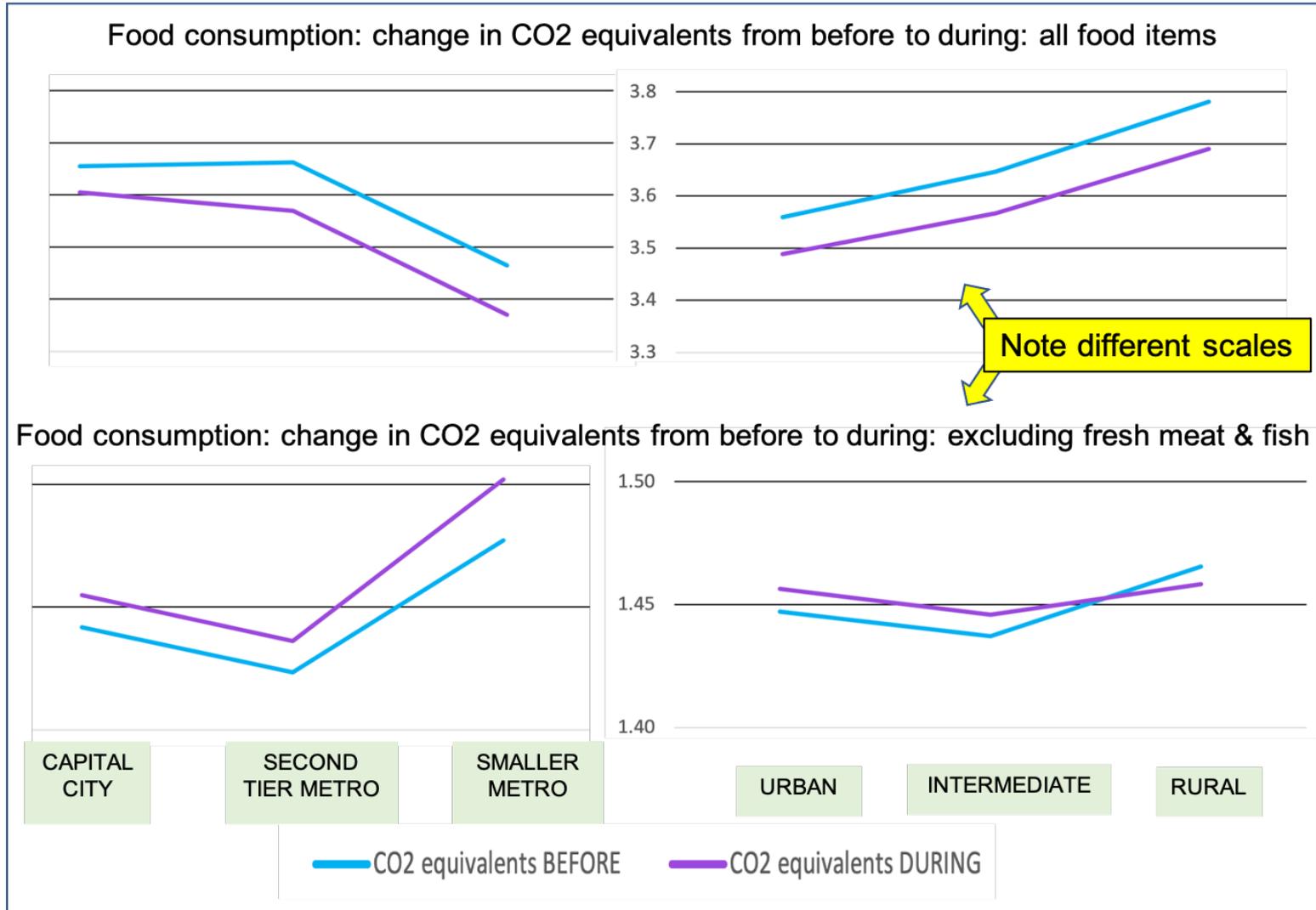
# Obtaining food: food banks and growing own



# Consuming food before & change between before to during

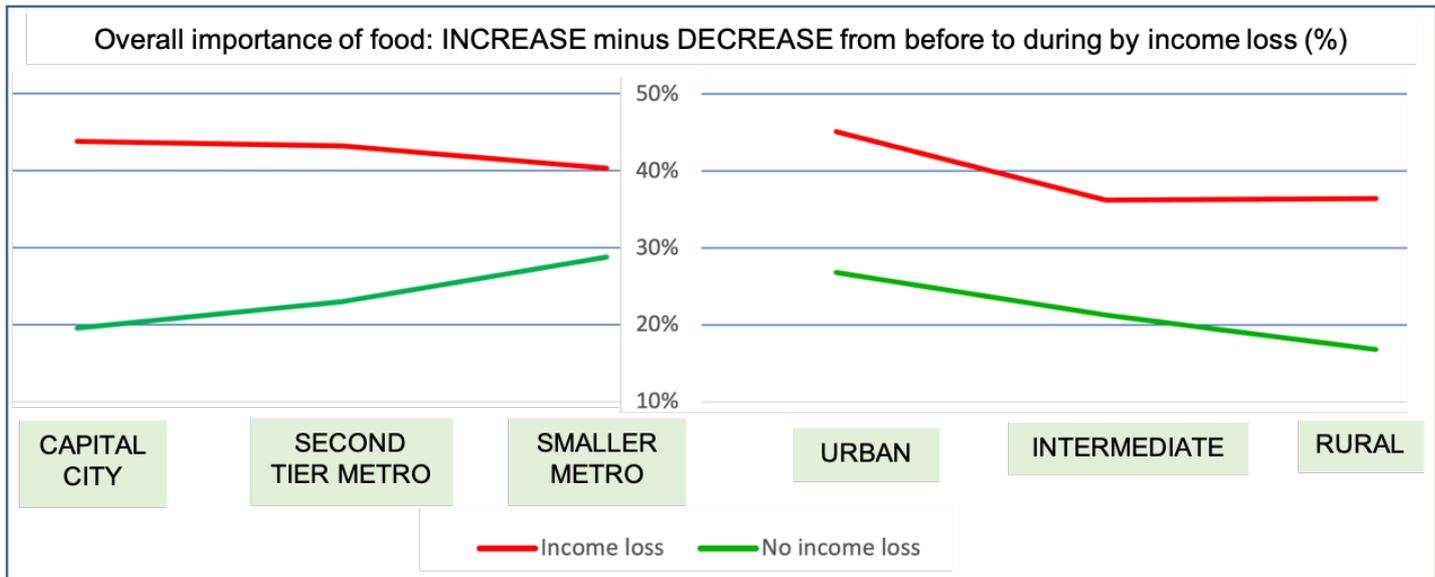
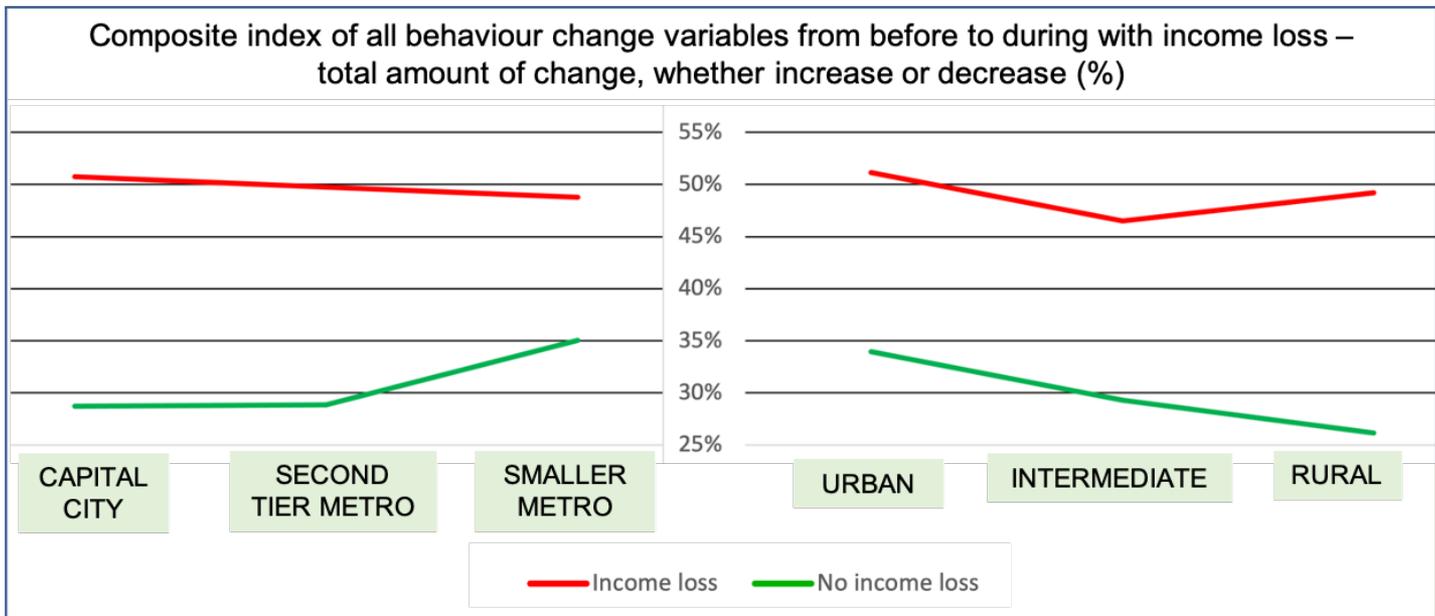


# Consuming food: CO2 emissions per household before to during

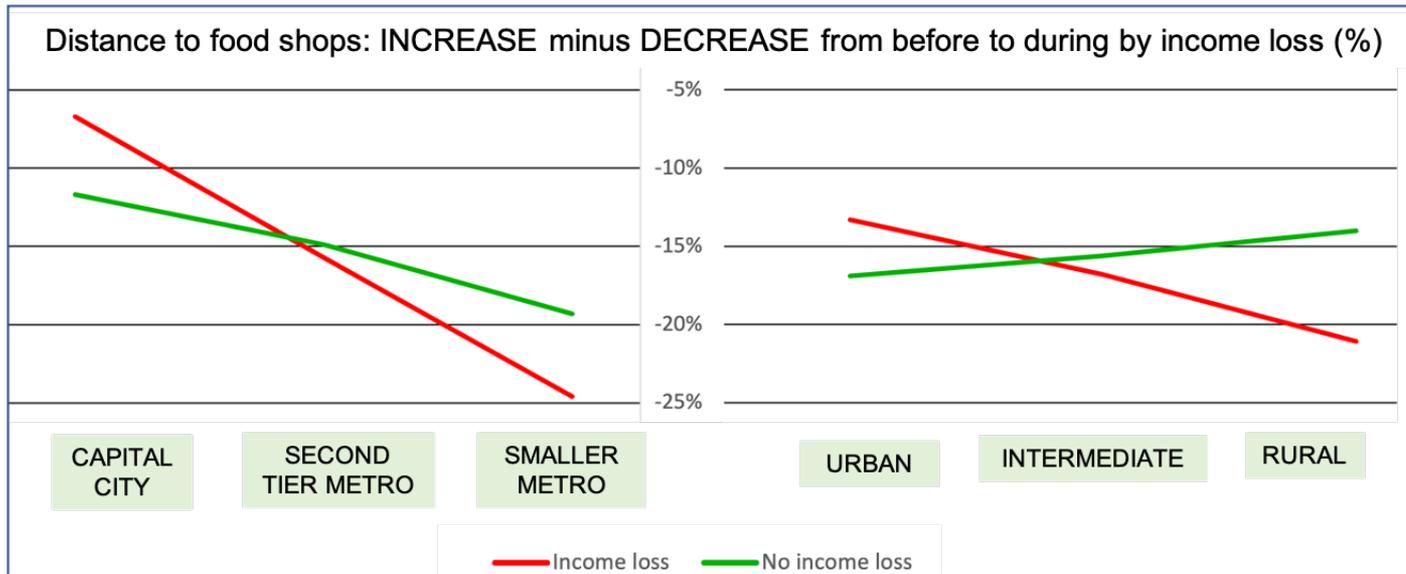
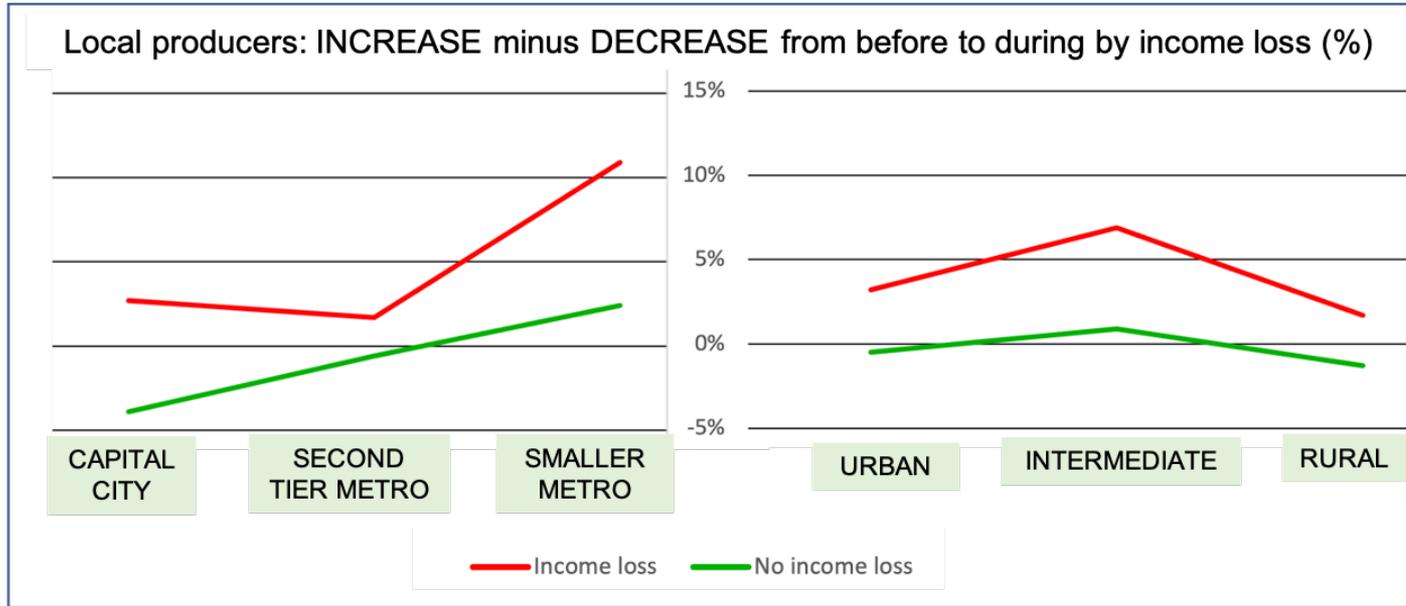


CO2 equivalents data calculated from the Big Climate Database: <https://denstoreklimadatabase.dk/en>

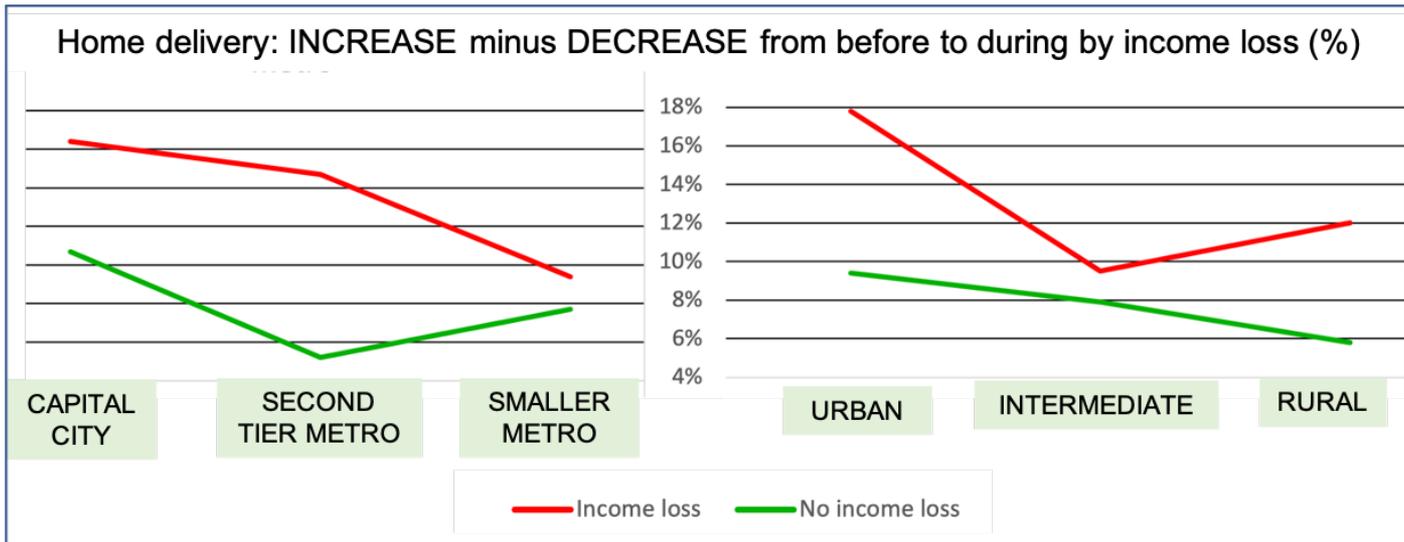
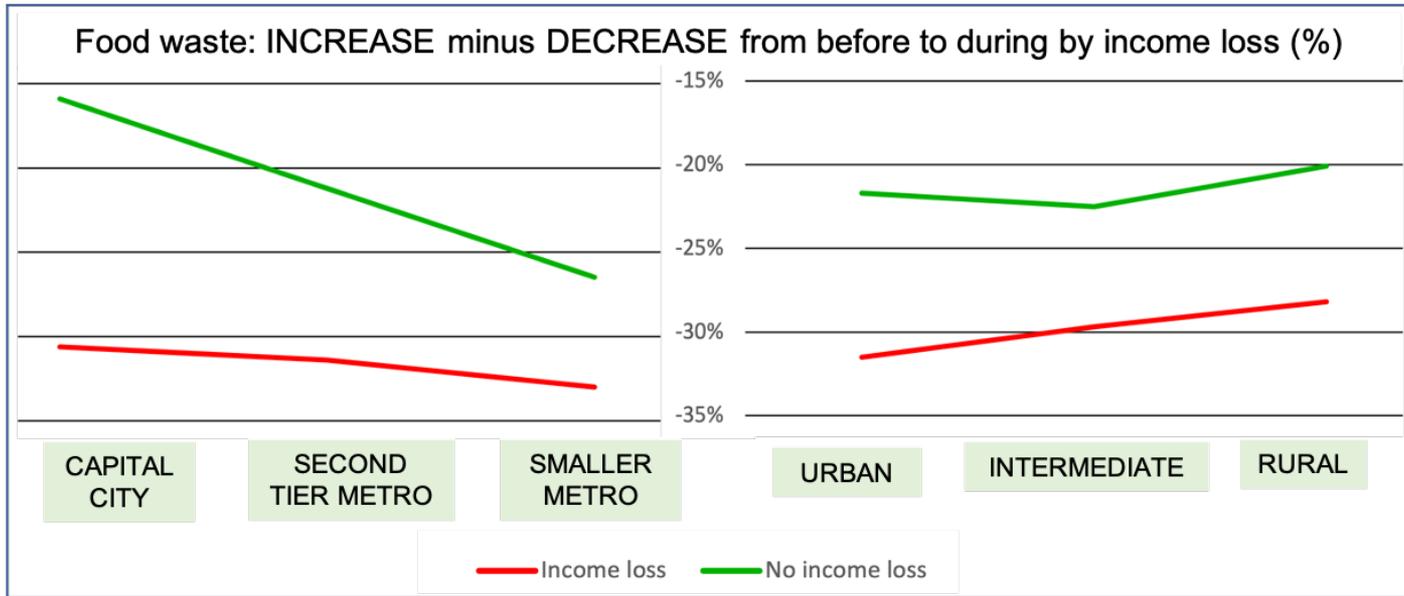
# Changed behaviour before-during Covid: summary change & food importance



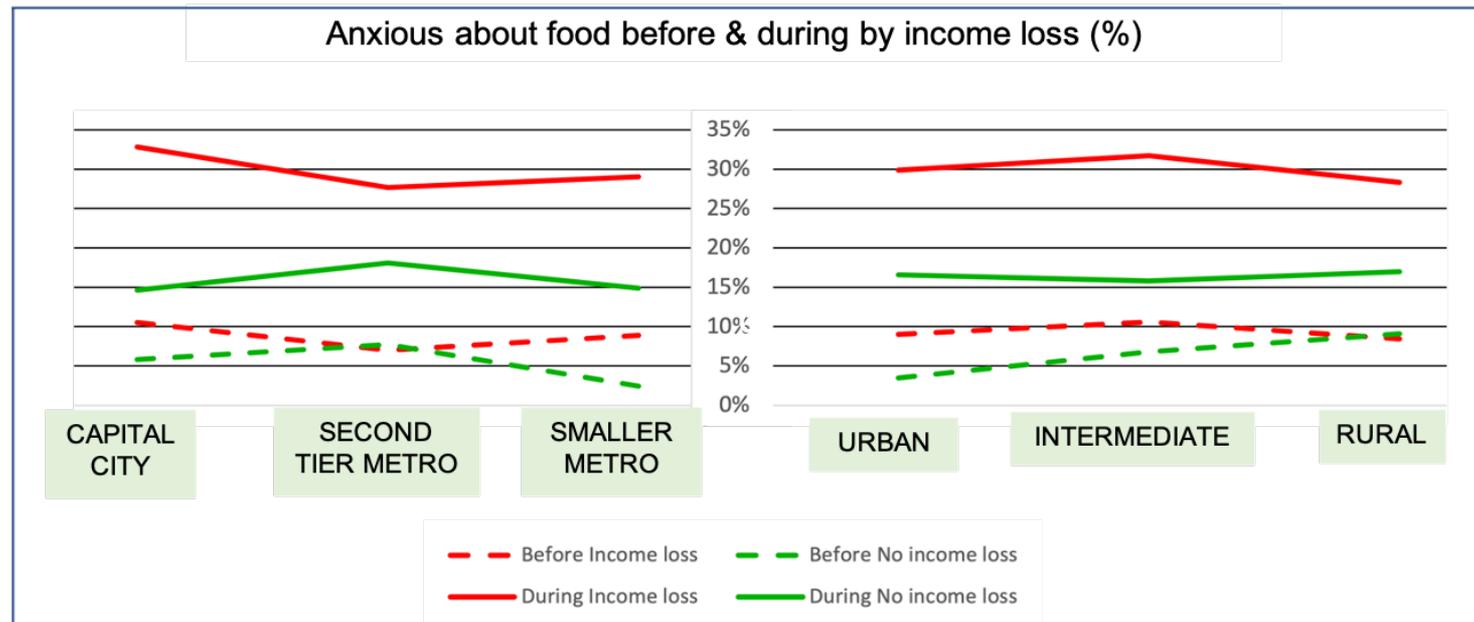
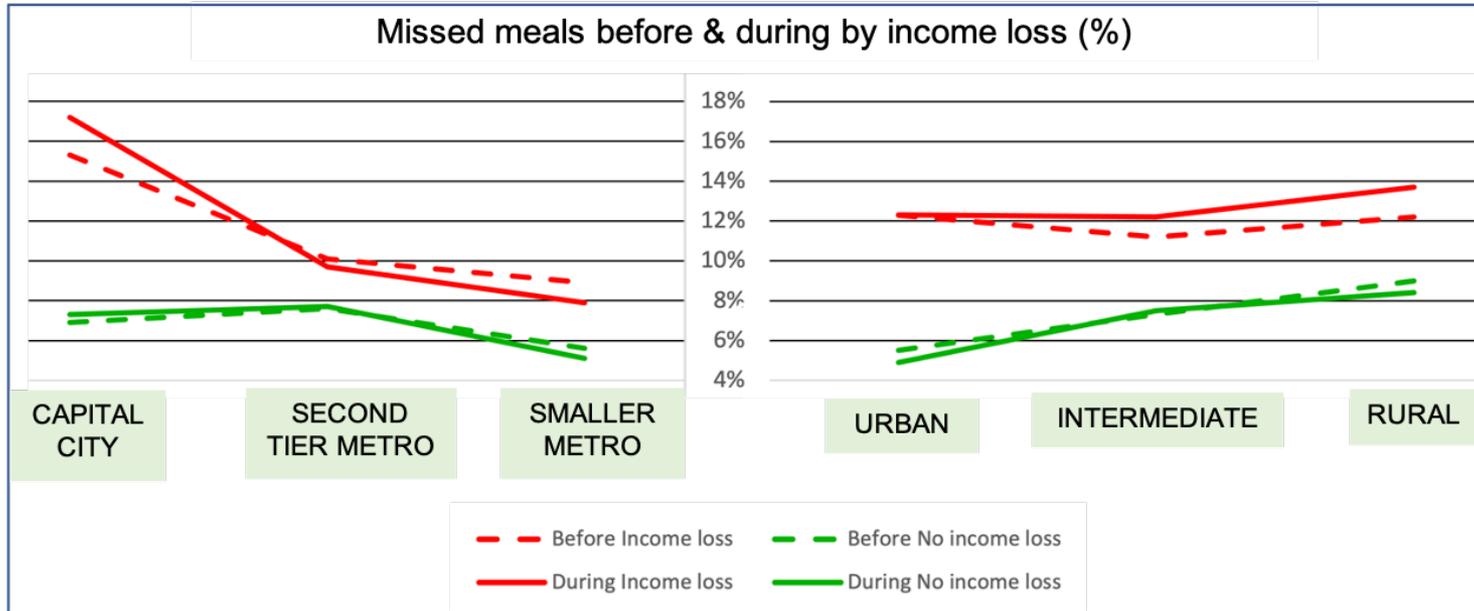
# Changed behaviour before to during Covid: local producers & distance travelled to shops



# Changed behaviour before to during Covid: food waste & home delivery



# Food stress: income loss, missed meals, food anxiety



## Some preliminary conclusions

### Some micro conclusions regarding consumer food behaviour before and during Covid:

- Large **significant relationships** across almost all variables between:
  - types of region
  - income loss and non-income loss households
  - before and during Covid.
- Clearly reveals the **stress and anxiety experienced by especially income loss and vulnerable households characterized by lower incomes, lower ages and higher household sizes.**
- Significant clusters of households losing income during Covid especially in the higher population density areas of **capital cities** and in low population density **rural areas**.
- **Metro and urban areas change food behaviour because of Covid more than intermediate and rural areas**, but whether this change is flexibly taking advantage of, or suffering from, Covid typically depends on the type of household.
- **Income loss households change more than non-income loss households**, i.e. are more sensitive to Covid and this sensitivity is more likely to lead to significantly greater food stress. **But the difference between the two households is significantly less in smaller metros.**

### Some macro conclusions regarding consumer food behaviour before and during Covid:

- Significant differences in consumer food behaviour, both before and during Covid, that frequently **increase or decrease along the centre-periphery continuum.**
- **However, smaller metros often prove the exception, and normally in a way reflecting their socio-economic strengths.**
- This **may reflect longer-term urban growth and development trajectories**, accelerated by Covid, of agglomeration, deglomeration and renewal – i.e. after a heavy concentration phase over the last generation, some decentralisation down the urban hierarchy is now taking place but not to second-tier traditional old industry metros but to new fast growing smaller metros.
- **Smaller metros' food behaviour** seems to reflect a population that is amongst the most affluent but also more secure, stable and often least affected by Covid.

## Some ongoing research priorities

- What are the **distinctly differential effects of geography and of the socio-demographics** of consumer food behaviour, especially in terms of vulnerabilities and inequalities, how are the two related to each other and to the environmental crisis? (Preliminary multiple regression analysis shows that regional type is always always an independent and significant variable.)
- **Are Covid-related changes temporary or (semi) permanent** (e.g. food waste reduction, more unhealthy diets, greater CO2 emissions disregarding fresh meat)?
- What implications are there for **food systems as a whole** and other food actors?
- **What interventions are needed** in relation to the above, by whom, when and how (e.g. how to support more local circular urban food systems, self/community food production, healthier more environmentally-friendly food)?
- Continued research on **differences between countries and country groups** (e.g. north, central, south Europe, eastern Mediterranean), between **coastal and non-coastal areas**, etc. (Preliminary analysis has shown significant differences that tends to be hidden in the composite data presented here)

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*University of South Bohemia  
Work in Czechia was supported by the Czech  
Science Foundation,  
grant No. 19-10694S.*

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**For more information go to the European  
Food-Covid-19 Network website**

<https://www.food-covid-19.org>