



## DISCUSSION GROUP 4

*Dietary exposure across Europe - current situation*

1. Data reliability with regards to sensitivity of the analytical techniques and consistency of the data reported by the member states, including new analytical techniques
  - **We have the necessary analytical methods**
    - **GC/MS, LC/MS/MS**
  - **New techniques - no added value**
  - **Two certified reference materials are available**
    - **Toasted bread and crisp bread. Other matrices?**
  - **Proficiency programs are running**
  - **Standardised NMKL method available**
    - **Can be adjusted to new matrices**
  - **Need to reduce costs for AA and AA adduct analysis**
  - **Ensure objective focused sampling schemes**
  - **Sampling and consumption data probably more limiting than analytical techniques**

2. Review the occurrence data for Acrylamide in food commodities available in Europe. Is there a need to revisit the exposure assessment?

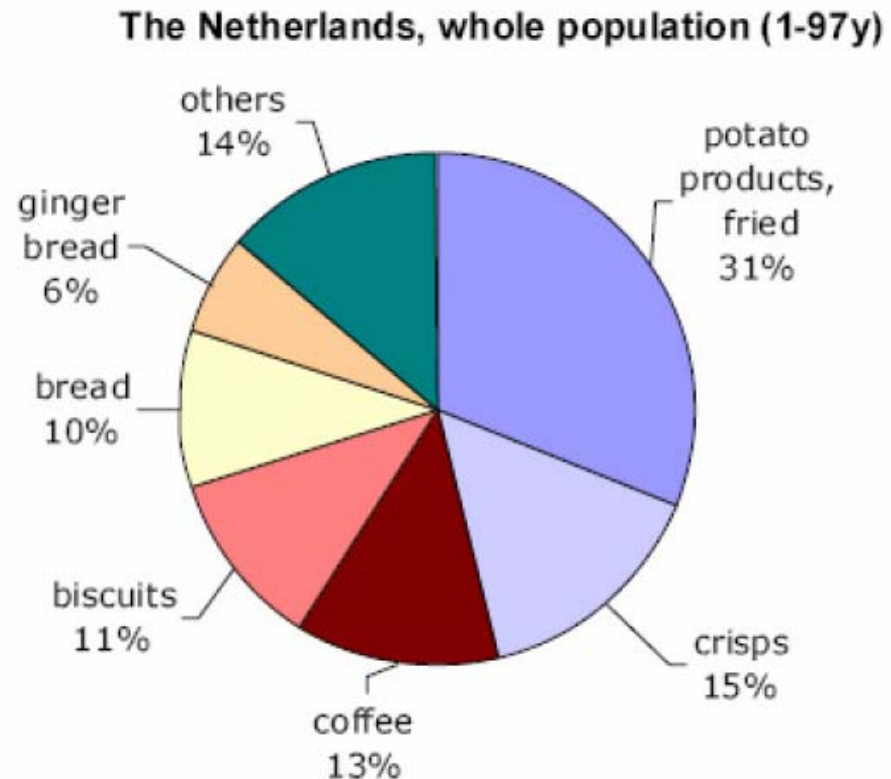
### **Need for revision – need for precision?**

- **MOE will not be affected in a substantial way by a revised current exposure assessment**
- **Different needs depending on whether you should**
  - **Consider a decision on whether specific managing activities should be introduced**
  - **Direct mitigation efforts**
  - **Inform consumers on the risks or issue dietary advice**
- **Depending on the preferred management option there might be a need for more precise exposure calculations**

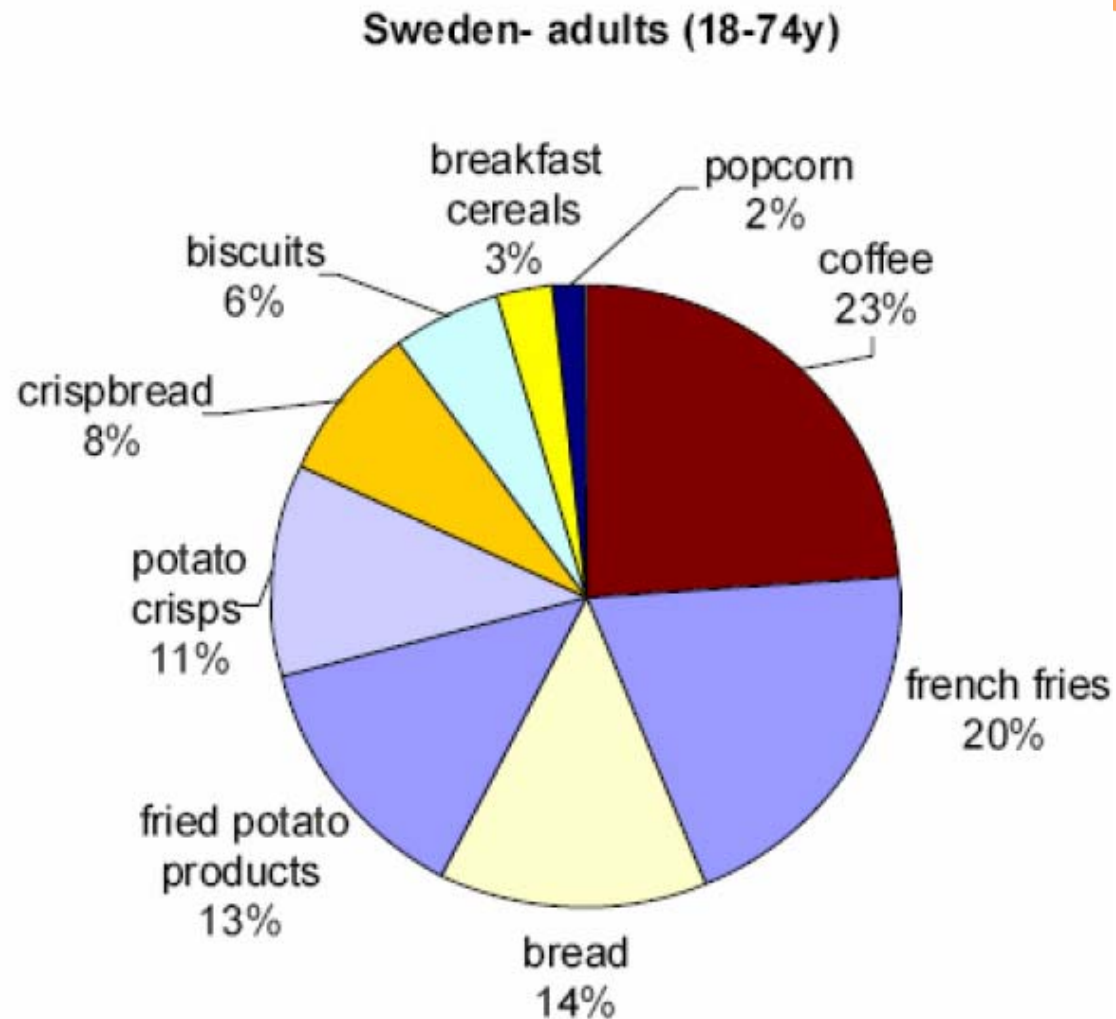
2. Review the occurrence data for Acrylamide in food commodities available in Europe. Is there a need to revisit the exposure assessment?
- **We probably know the main sources of exposure for the “average” consumer**
    - Roughly 1/3 each from potato products, cereal products, coffee
    - It is still important to identify specific risk groups with
      - High exposure, e.g. children
      - “Exceptional” consumption of specific food commodities or specific ethnic foods, where the levels of Acrylamide are not known
      - Requires better data on both consumption and occurrence
  - **Differences between countries on home cooking and catering**
    - few solid data available
    - few handles for intervention available
  - **Need to validate FFQ**
    - E.g. by duplicate diet studies

### 3. Which food commodities contribute most to Acrylamide exposure – possibility and efficacy of mitigation measures?

**Contribution of different food groups to the acrylamide exposure.**

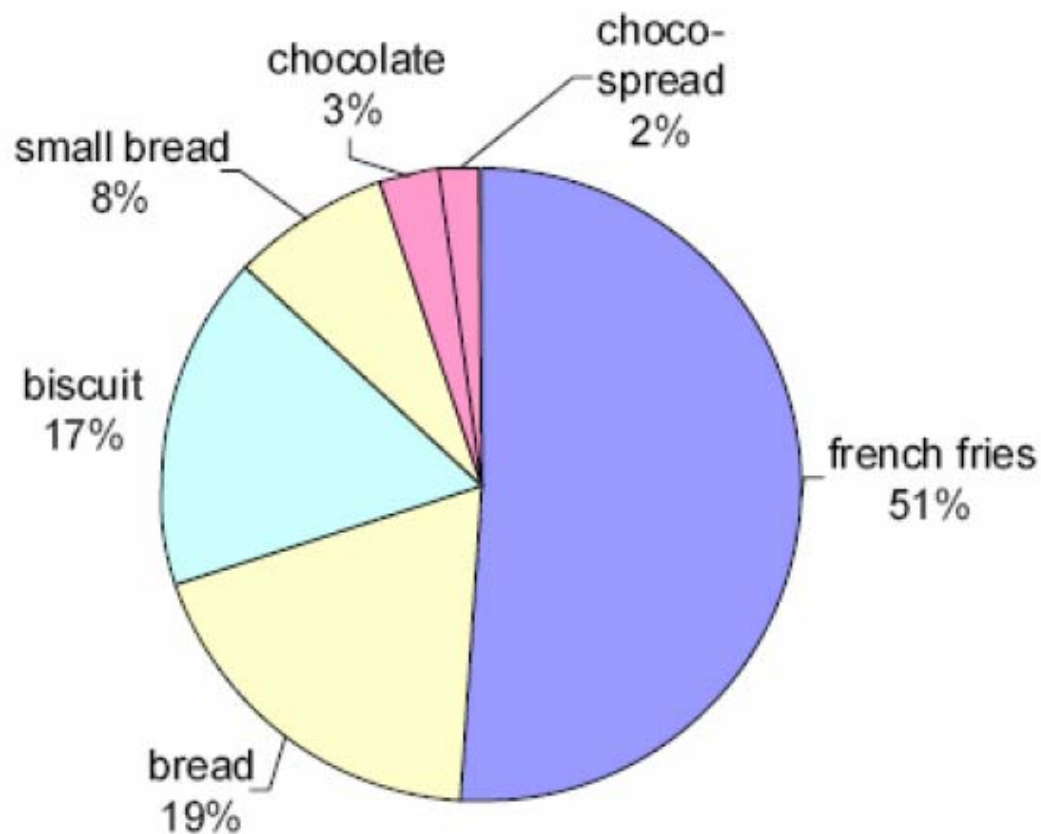


## Contribution of different food groups to the acrylamide exposure.



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Belgium- adolescents (13-18y)

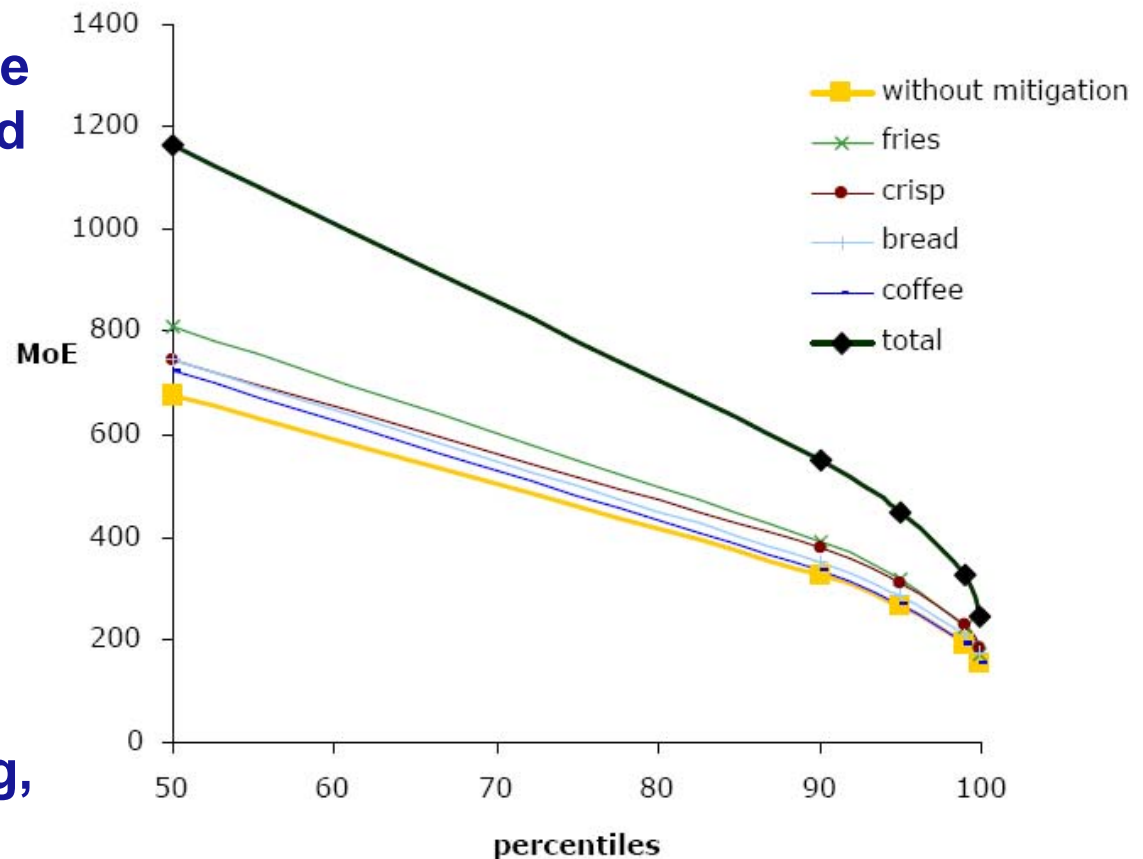


## Modeled distribution of Margin of Exposure (MoE) of the acrylamide reduction scenarios over the percentiles.

Mitigation measures are of great importance and should be pursued.

Many Companies have implemented some mitigation measures

Desirable to consider further measures to reduce exposure, e.g. home cooking, catering, dietary changes





4. Recommendations to improve data collection and data assessment in the future.
- **Analytical techniques are well validated**
  - **Make all relevant data accessible, industry and MS**
  - **Assess specific risk groups**
  - **Depending on the preferred management option there might be a need for more precise exposure calculations**
  - **Consider the side effects of reduction measures**
  - **Harmonise and utilise the probabilistic exposure assessment to improve the result of the assessment**
  - **Consider the relative importance of acrylamide vs other food process contaminants.**