Preliminary assessment of a methodology for determining food waste in primary school canteens.

Rome, 9th June 2016.

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*REDUCE*: Research, Education and Communication

An integrated approach for preventing and reducing food waste
REDUCE: Research, EDUcation and Communication

Collect data on FW and provide a set of tools to prevent and reduce it at the last stages of food supply chain: distribution, food service, household

Aims of research activities in primary school canteens:

- Collect quali-quantitative data on FW;
- Estimate children food intake;
- Improve pupils’ awareness about food waste (monitoring as a tool of active learning).
Quantification of food waste is done through dish type, according to the typical structure of the Italian meal.

Data collection

Pasta or rice  Animal products  Vegetables  Bread  Fruit

Data are adjusted to account for non-avoidable food waste
(fruit peels, fruit cores, chicken bones)
Quantification phases

The monitored food can be divided in **three stages** and the quantification is **performed by the involved actors**.

- **Prepared food**
  - Where: *kitchen*
  - Who: kitchen employees

- **Served food**
  - lunch time

- **Non-served food**
  - Where: *school canteen*
  - Who: teachers and pupils

- **Consumed food and plate waste separation**

- **Plate waste**
  - Where: *school canteen*
  - Who: teachers and pupils
Evidence from the field observation

✓ Kitchen employees were committed;

✓ Teachers were motivated, but the monitoring phases were partially overlapping with other duties;

✓ Pupils were able to separate the plate waste, even if children less than 8 years old need to be assisted by teachers.

Critical points

1. Sometimes the number of bread and fruit portions are different from the number of pupils having lunch.
2. Certain dishes can stick to the plate.
3. A substitute teacher arriving at school unaware of the ongoing experiment.
Conclusions

The involved actors were able to do what required of them. They can take an active role in FW quantification.

The methodology needs to be:

1. Adapted to the capabilities of children as well as to the duties of teachers during and after meal;

2. Flexible in order to take account of national specificities (meal structure for the collection of food waste, distinction of edible/non edible parts).

Next steps

Pilot study
4 schools, 2 weeks

3 Regional studies
40 schools per Region, 4 weeks
Thank you

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