



MINISTERO DELL'AMBIENTE
E DELLA TUTELA DEL TERRITORIO E DEL MARE



REDUCE: Research, Education and Communication

An integrated approach for preventing and reducing food waste

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

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REDUCE: Research, EDUcation and Communication

Collect data on FW i 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).

Data collection

Quantification of food waste is done through dish type,
according to the typical structure of the Italian meal

PRIMI



Pasta or rice

SECONDI



Animal products

CONTORNI



Vegetables

PANE



Bread

FRUTTA



Fruit

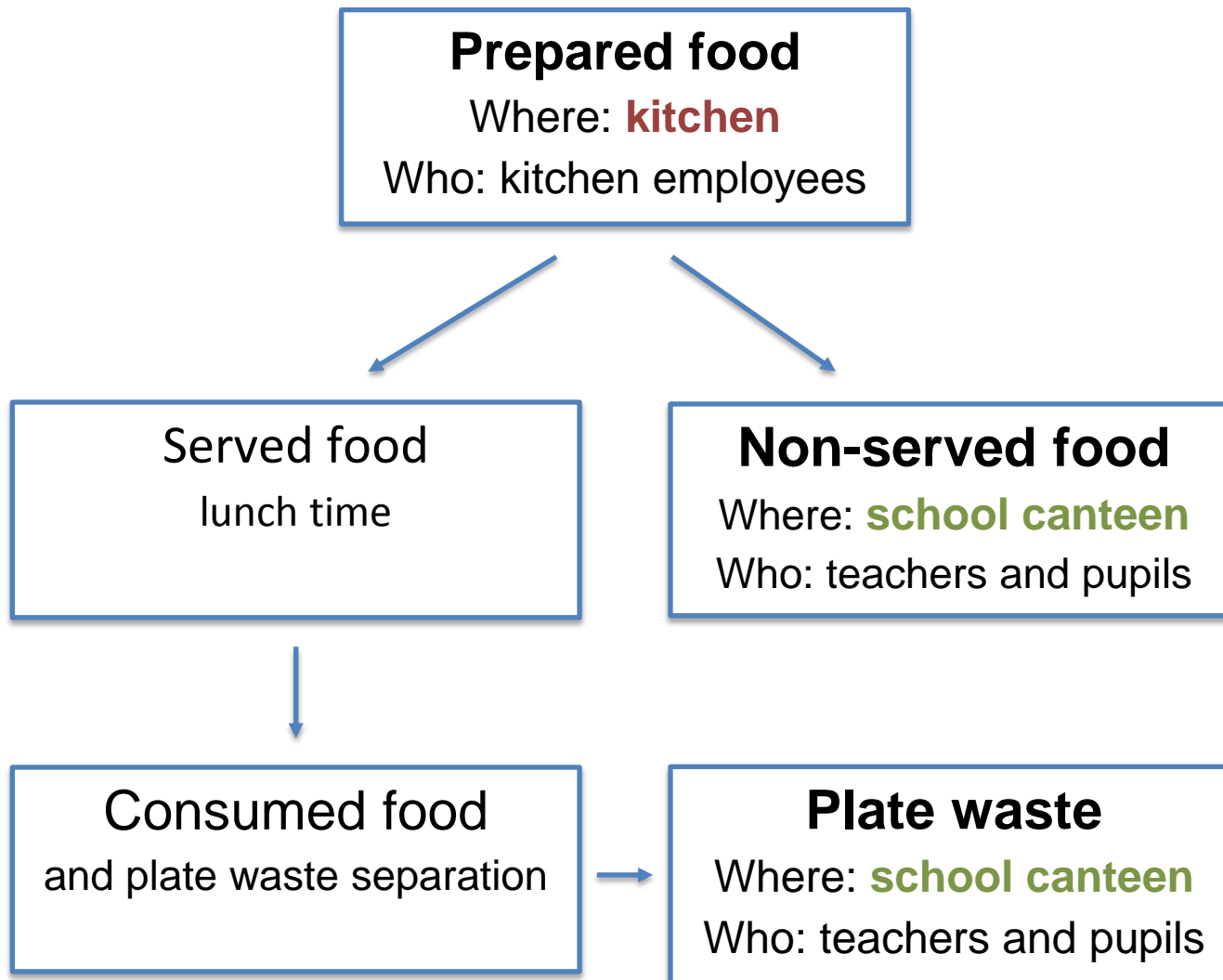
Data are adjusted to account for non-avoidable food waste

(fruit peels, fruit cores, chicken bones)



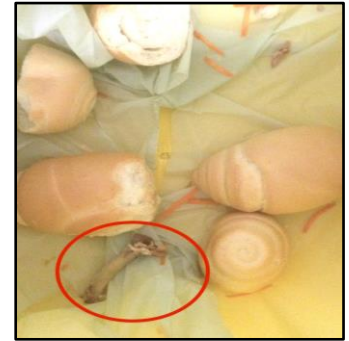
Quantification phases

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



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.



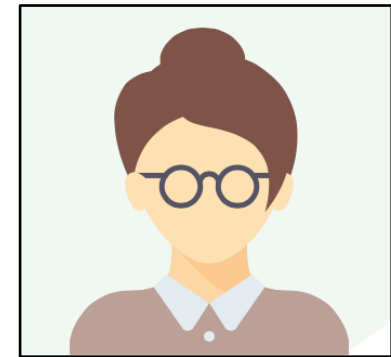
Critical points



Sometimes the number of bread and fruit portions are different from the number of pupils having lunch.



Certain dishes can stick to the plate.



A substitute teacher arriving at school unaware of the on going 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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