

CHORIZO: Changing practices and Habits through Open, Responsible, and social Innovation towards Zero food

Young peoples' behaviour towards lunch-packs

Introduction

According to a study by a Danish NGO in 2017^[1], only 12% of Danish school pupils are involved in preparing their own lunch-pack and only half of the school pupils feel full after their school lunch, due to not having eaten the entire lunch-pack. However, around 26 million lunch-packs per year are thrown out in Denmark^[2] as reported by politiken.dk in 2022.

At the same time, the study shows that in Denmark 12 minutes is the average time that a parent spends producing a home-prepared packed lunch for one child to be consumed at school. And with possibly more children in a family, it might end up being a considerable amount of time spent on making lunch-packs in the morning. Pupils' involvement in the lunch-pack preparation is always an issue. Is this a social practice subject to reflection, continuous improvement, and dialogue between parents and children? One might expect that, but according to a study conducted within the CHORIZO project, in most cases this is not what happens.

There is ongoing international debate on different ways of eating at school, such as the formation of a school meal coalition in 2020 that advocates for nutritional school meals for all children by 2030.

These initiatives may be interesting for professionals such as nutritionists, public food planners and urban food strategists. In some countries, like Denmark, National School food programmes are lacking, so children rely on domestically prepared lunch-packs.



OBJECTIVES OF THE STUDY

One of the case studies within the CHORIZO project, aimed to understand social norms related Food Waste (FW) behaviour among pupils - “school children” - especially as regards lunch-packs in the school environment.

The case study focused on five aspects: i) understanding pupils’ awareness of FW; ii) motivations pertaining to FW and amount of FW created by pupils; iii) opportunities and barriers to reduce FW; iv) skills and knowledge needed to tackle FW and maintain a healthy diet; and lastly v) possible prevention strategies to tackle FW.

These five aspects were explored in four different eating scenarios by pupils i) their lunch pack prepared by parents; ii) dinner at home; iii) lunch served at the school canteen; iv) a meal out-of-school (fast-food) during school lunchtime.

Among these various eating scenarios, the behaviours regarding the eating of the family-prepared lunch-packs revealed interesting insights in relation to FW and its impact on pupils' health.

Methodology used

To gather the data on Food Waste (FW), the study utilized qualitative research methods based on interviews. These interviews were conducted with key individuals who play an active role in influencing pupils’ behavior as well as being part of the lunch-pack environment.

In total fourteen interviews were conducted with specific objectives targeted at different actor groups:

- Five **Focus Group Interviews (FGIs)** with a total of 50 school pupils to identify the FW actions and their motivation to consume or waste lunch-packs.
- Nine **In-Depth Interviews (IDIs)** with four parents, three schoolteachers and two school leaders to identify the FW actions and pupils’ motivation, as well as to explore behaviour change strategies.

PROMINENT SOCIAL NORMS RELATED TO CONSUMPTION OF THE LUNCH-PACK

Given that pupils’ behaviour is shaped by social influences from a range of different factors, it is important to understand the social environment in which pupils interact with food.

- Pupils’ behaviour is influenced by peer groups, celebrities, media trends, and social media content, which plays a crucial role in shaping their motivations and forming new social norms to consume or waste lunch-packs. Some of the social norms identified in this case study that influence consumption of the lunch-pack are: Pupils’ perception of fruits and vegetables as an undesirable food quality, based on sensory qualities such as taste and appearance. For example, apples, cucumbers, carrots are considered less acceptable in comparison to chocolate, chips, pizza, and other food items among pupils’ peer group.
 - Pupils are influenced by their peer groups as well as social media influencers. For example, if their peers perceive a certain food item as “uncool”, the pupils will throw it away, rather than consume it.
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- Parents most often choose the food items for their children’s lunch-packs without their involvement due to either time constraints or the fear of their children selecting more appealing but unhealthy options instead of healthier ones.



FINDINGS OF THE STUDY AND REFLECTIONS

- Pupils’ attitude, awareness & motivations regarding the consumption or wasting of their lunch-pack: Pupils are aware that wasting food is a waste of resources. Therefore, economic benefits played a crucial role in motivating factors to reduce FW, such as for example acknowledging that throwing food out is considered equal to “throwing out money”.
- Pupils have come to better understand the consequences of FW within the current context of climate change and world hunger, due to social media influences and media trends.
- Pupils' likelihood of discarding their lunch-pack is largely influenced by their perceptions, preferences, and expectations regarding taste, texture, and freshness of food items. Their individual interpretation of food quality plays a significant role. Pupils tend to be “selective and picky”, favoring sweet, salty, and fatty foods such as hot dogs, pizza, chips, chocolate bars etc. over fruits and vegetables.
- Parents tend to prioritize pupils' food preferences, as well as ensuring that they provide enough food and give their children sufficient choices, by increasing the amount of food in a lunch-pack by more than what is necessary.

Gender or generational differences:

There were no differences in the amount of FW generated among genders. However, the younger the pupils were, the more likely they were to eat what they brought from home. Conversely, older pupils more often throw out their meals and lunch-packs.

RECOMMENDATIONS

Parents can play a vital role in reducing FW and increasing the consumption of lunch-packs

- There is a missed feedback loop and dialogue between the pupils and their parents. Most of the pupils expressed their fear of making their parents angry by informing them that they do not like most of the items in the lunch-pack, or that they do not finish their lunch-pack and thus throw out uneaten items, although pretending to have eaten everything. Thus, parents might not be aware of the actual waste of a lunch-pack. Better communication with pupils about their likes and dislikes and maintaining the feedback loop and developing trust is crucial.
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- Include children in the process of preparing lunch-packs in order to nudge their preferences as well as understanding the value of prepared food.
- Children can easily develop a selective repulsion towards many fruits and vegetables, so encouraging them to regularly taste these foods from an early age could help foster a more positive attitude towards fruits and vegetables.
- Parents should shift the focus from providing big portion sizes to providing high quality lunch-packs that are balanced with regards to nutritional value.

Researchers to build interventions in school settings

- Co-create an intervention together with teachers, pupils, and parents to make it more child and school friendly. However, approach schoolteachers when they are not pressed to prepare for exams as they have to follow school schedules.
- Although a qualitative interview brings out the nuances, a survey could reach a higher number of parental participants, which can facilitate a better understanding of the situation / context.
- Adapt the questions according to the pupil's age and their context. For example, sustainability might not be understood by pupils, but they might be familiar with the impact of climate change in their daily life.
- Interviews with pupils (e.g. Focus Group Interviews) can be done in the form of a workshop, which can be beneficial to both pupils and teachers to understand social norms related to food waste and reduction tips.

Practitioners, such as teachers, external educators, and curriculum developers

- Food waste and food literacy materials should align with already existing subjects and teaching activities such as home economics, SDGs focused activities, and STEM subjects such as Science, Math, or Design.
- Food education and learning become more interesting when including practical examples of sustainability and connecting the theory with children's daily life activities. This can be achieved by including hands-on activities such as a project-based learning week, cooking, gardening, harvesting, etc. However, they should be made aware as well about the overall food system and given a proper understanding of how our modern food system works.
- The learning materials about food and lunch-pack preparation should also be tailored towards parents in order to help them build upon their lunch-pack preparation skills, taking into account not only the preferences of their children, but balancing those preferences with healthy food options.

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