

Executive summary

Social influences of children's eating behaviours

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BACKGROUND

The rising childhood obesity rate is a major public health challenge. Previous research has shown that eating habits established during childhood can persist into adolescence and adulthood, and that parents, peers, siblings and social media play a key role in the development of children's eating habits. Besides, it is established that cognitive abilities may also drive food rejections especially in young children.

In order to promote healthy eating in children from a young age, it is crucial to more properly assess how these factors interact and contribute to the early development of eating behaviours and food preferences/rejections. Interestingly, the review of the scientific literature revealed that the number of studies about fathers and feeding is still limited, and that there is a lack of studies examining how peer and sibling impact is related to children's and adolescents' eating behaviour. Moreover, it is worthy to note that much research of this project was conducted during the COVID-19 pandemic, which provided a unique opportunity to investigate this unseen situation and according changes in people's habits in relation to children's eating behaviours and parental eating and feeding behaviours.

This WP aimed to gain more insight into the micro- and macro-social influences that shape child's eating behaviours and eating socialization, including both parents, peers and siblings.

KEY FINDINGS

Both maternal and paternal feeding practices and styles were predictors for child eating behaviours.

Fathers and mothers perceived their child's eating behaviors in similar ways, despite mothers taking significantly more meals with their child than fathers.

Fathers reported using **more pressure to eat and food as reward**, but reported **lower levels of "family meal setting" than mothers**.

In households where both parents used **higher levels of pressure to eat**, the child showed a significantly **lower food enjoyment and a higher food neophobia** than expected if only one parent used this pressuring practice.



Parents also use a wide range of practices to determine the **“right portion”** for their child, mostly determined by **“intuition”, and not by sanitary recommendations**. For most parents, determining portion sizes is an intuitive action that depends **on habits** and mainly arises **from experiences** with feeding their child and **his/her appetitive traits**.

Most parents do not search for information/recommendations to guide their practices. However, stimulating optimal self-regulation of eating in children is important and parents can play a crucial role in this.

The strict lockdown elicited a drastic change in eating and feeding habits both on parent and child level. This unusual sanitary situation drove some parents to turn a blind eye to the usual feeding rules, and **to privilege enjoyment and comfort at home**.

Changes in child boredom and parental stress were found to influence eating and feeding behaviors.

Children with higher levels of food rejection have **poorer knowledge of foods conventionally eaten together, or foods for specific mealtimes**.

Educating children about foods, eating situations and conceptual knowledge can be an effective strategy for **increasing familiarity and promoting greater food acceptance**.

Peers influence on healthy eating is **more often negative than positive**, i.e. that **peers rather increase the consumption of unhealthy foods rather than increasing the consumption of healthy food**.

Sibling influences have little importance as the parents govern meal structure and availability of healthy food at home.

To encourage preadolescents children’s healthy eating behaviour, an app “Food Boss” has been developed and validated. This app constitutes a useful and pleasant tool, helping children to learn about healthy food and to make food diaries.

CONCLUSIONS AND RECOMMENDATIONS

- These findings underline the importance of studying the individual role of each parent in child feeding research and that both parents within families **should avoid using coercive practices**. This could finally stimulate new interventions and recommendations addressed **to both parents**.
- Stimulating optimal self-regulation of eating in children is important and parents can play a crucial role in this. One way to accompany parents in providing appropriate portion sizes is **1- to inform them about the capacity of the child in regulating food intake based on their hunger and satiety sensations, and 2- to help them to include children in this process**.
- The exceptional sanitary context imposing a strict lockdown provided unique insights into how a drastic change in habits is accompanied by changes in eating and feeding habits both on parent and child level. These insights could be useful for future studies and interventions, and could be of interest to policy makers. Even though the COVID-19 lockdown was an unusual situation, the increased manifestation of these food approach behaviors and their link **with child boredom and parental stress could be cause for concern**. It suggests that these **children did not merely rely on their internal cues of hunger and satiety when asking for foods/drinks (crucial for an optimal self-regulation of food intake); and ignoring internal cues could possibly make children overeat and induce weight gain if maintained for a long period** (Monnery-Patris et al., 2019). With age, research has shown that children rely less on their internal cues for their food intake (e.g., Fox, Devaney, Reidy, Razafindrakoto, & Ziegler, 2006). **It is therefore important to encourage children (and their caregivers) from a young age to listen to their inner sensations for food intake, and to maintain this even in more challenging situations**.

- Parents and schools could play an important role in guiding pre-schoolers in using adaptive self-regulation strategies and in modeling these strategies. In both children and adults, several types of interventions **such as mindfulness-based interventions and appetite awareness training have been proposed to increase awareness of hunger and satiety cues, with various levels of success.** More researches are still warranted to more properly assess these opportunities.
- The research highlighting the relationship between food rejections and conceptual knowledge in 3-4-year-olds suggested opportunities for development psychologist and public health professionals to improve children's knowledge of food and foster increased dietary variety. Guidelines have been developed for the implementation of practical recommendations for managing feeding practices of caregivers, in the family and school food catering context, and of nudges for improving food choice at home and in broader food choice environments (e.g., school) have been developed (See Annexe 1). These guidelines have been developed as a complement to existing guidelines (EFSA, European directives), and provides ideas and activities for parents and caregivers to teach children about food and boost food acceptance and wider dietary variety.
- **To encourage preadolescents children's healthy eating behaviour, the "Food Boss" app** could serve as an attractive and low-cost intervention to reach a wide population of children for the promotion of healthy eating and prevention of childhood obesity.