The Child Feeding Guide: A digital health intervention for reducing controlling child feeding practices and maternal anxiety over time

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Abstract

Fussy eating and food refusal are common in young children. These behaviours can contribute to anxiety or concern in parents and caregivers, who have called for credible support to help them navigate the challenges of feeding young children. Given recent increases in technology, and use of the Internet as a trusted source of parenting support, the Child Feeding Guide digital health intervention was created to provide evidence-based support to parents and caregivers to help them to feed children and establish healthy eating habits from the early years. An evaluation was conducted with 25 mothers (with a child aged 6 months to 4 years) who used the Child Feeding Guide website/app over 4 weeks. Mothers provided information about their feeding practices and anxiety levels at baseline, and again 4 weeks later, and answered questions regarding the acceptability and use of the digital support resource. Significant decreases were seen in maternal anxiety and in maternal use of pressure to eat and restriction of food from children for weight reasons. Mothers reported that the Child Feeding Guide was easy to use, that they valued its credibility and reassurances, and that its content helped them to better understand their child's eating behaviour. These promising findings suggest that naturalistic use of a digital health intervention could contribute to reductions in mothers' use of controlling feeding practices and levels of anxiety. Such findings are important for supporting the development of healthy eating habits in young children and are likely to be relevant to health and childcare professionals.

Keywords: child feeding, digital health, parenting intervention, maternal anxiety, pressure to eat, restriction of foods

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The challenges of feeding young children

Supporting children to eat a wide range of nutritious foods can be challenging for parents and caregivers, particularly in the context of obesogenic environments where foods high in fat, sugar and salt are increasingly

prevalent and palatable (Porter *et al.* 2018). In the UK, less than 20% of children eat the recommended five portions of fruit and vegetables per day (NHS Digital 2018). The importance of establishing a healthy diet early in life is widely accepted and linked to later positive health outcomes including a lower risk of preventable diseases such as obesity, type 2 diabetes and cancer (Aune *et al.* 2017; Health & Social Care Information Centre 2017). Eating habits established early typically continue throughout childhood and into adulthood (*e.g.* Mikkilä *et al.* 2005), so helping parents/caregivers to support children's healthy development from the early years is paramount.

Children's fussy eating behaviours are commonplace and fussy eating or food refusal can be concerning for parents/caregivers (Walton *et al.* 2017; Boswell *et al.* 2019). Many children go through a phase of fussy/picky eating which often starts around 18–24 months (Birch & Fisher 1998). This can include children refusing new and previously liked foods and is often associated with the avoidance of healthy foods, such as fruits and vegetables, and a refusal to eat family meals (Dovey *et al.* 2008; Harris *et al.* 2019). Evidence suggests that parents tend not to offer young children a disliked or refused food more than around five times (Carruth *et al.* 2004) which means that all too easily, numerous foods can become eliminated from young children's diets. The feeding practices and behaviours used by parents and caregivers in these early years can shape children's lifelong eating behaviours and health outcomes (Ventura & Birch 2008) and therefore represent an important area for intervention.

Many parents/caregivers use feeding practices with their children which are considered controlling, such as pressuring children to eat more than they wish, using food as a reward (*e.g.* for eating another food or for a exhibiting a desired behaviour) or overtly restricting children's intake of certain foods (usually less healthy, 'junk' foods). While often used with the best of intentions, these controlling feeding practices can have unintended consequences such as impairing children's autonomy around eating and are often associated with less healthy eating behaviours in children (Birch *et al.* 2001; Wardle *et al.* 2005). For example, children report *less* liking for foods that they have been pressured to eat (*e.g.* Galloway *et al.* 2006) and tend to eat *more* of the foods that are restricted when they subsequently have free access (*e.g.* Birch *et al.* 2003; Boots *et al.* 2018). Both of these outcomes are typically the opposite of parents' intentions, illustrating how controlling feeding practices can disrupt

children's responses to their internal hunger and satiety cues which, in turn, can contribute to the development of overweight and obesity (Faith *et al.* 2004). Additionally, when food is used as a reward, it can be associated with later over-eating behaviours and subsequent dietary restraint (Puhl & Schwartz 2003; Farrow *et al.* 2015), similarly disrupting children's natural self-regulation of hunger and satiety.

It is common for parents or caregivers to feel concerned, worried or anxious if their child refuses food and/or eats a limited, perhaps predominantly unhealthy, diet (*e.g.* Coulthard & Harris 2003; Norman *et al.* 2015; Walton *et al.* 2017; Daniels 2019). Parental concern about children's fussy eating has recently been shown to be related to greater use of more controlling feeding practices (Harris *et al.* 2018). Furthermore, maternal symptoms of anxiety have also been associated with greater reported use of pressure to eat, restriction (both for reasons of health and weight control), using food to regulate emotions and using food as a reward in mothers of 2-4 year-olds (Haycraft 2020). Together, these findings demonstrate that concern or anxiety around children's food intake is prevalent and linked to parent/caregiver feeding behaviours.

Research into ways to promote the development of children's healthy eating behaviours is abundant and as well as recommending that parents/caregivers avoid using controlling feeding practices, this research also advocates the use of numerous behaviours which have been shown to be effective at promoting children's healthy food intake. These methods include repeated exposure, so that children have continued opportunities to learn to like new tastes and textures (*e.g.* Wardle *et al.* 2003; Cooke 2007; Holley *et al.* 2015), role modelling, so that children can learn from seeing others eating and enjoying a variety of foods (*e.g.* Palfreyman *et al.* 2014; Holley *et al.* 2015; Finnane *et al.* 2017), and trusting children to eat according to their internal hunger and fullness cues, by offering suitable portion sizes and being responsive to children's signals around hunger and fullness (*e.g.* Fisher & Kral 2008; Tan & Holub 2011).

Sharing information with families

While the research evidence is now clear about what is (and is not) recommended to support the development of children's healthy eating, this information is slow to transfer to parents and caregivers who need evidence-based advice. Indeed, parents and caregivers have reported a lack of effective, credible information

to support them with feeding children once complementary feeding has begun and children have transitioned to eating solid foods (Mitchell *et al*. 2013a). Spence *et al*. (2016) found that many Australian mothers of 2 year-olds reported being unaware of some of the recommended feeding practices. They found that mothers felt that learning about and adopting those recommended practices [through the Melbourne *Infant Feeding, Activity and Nutrition Trial* (*InFANT*) cluster-randomised controlled trial] made child feeding easier (Spence *et al*. 2016). This finding is encouraging but highlights a need to communicate information about recommended feeding practices and behaviours to the parents and caregivers who implement them.

Increasingly, health-related information is being shared digitally, via websites and apps, and is frequently accessed using mobile devices (phones, tablets) as well as computers/laptops. Nearly every adult in the UK (96%) uses a mobile phone (Ofcom 2019), and so it is unsurprising that there has been a significant increase in health interventions which are delivered via digital technologies [also known as electronic health (eHealth) and mobile health (mHealth) technologies], such as smartphones, websites or text messaging. Digital health interventions offer significant potential to deliver effective, cost-effective, efficient, highly scalable behaviour change programmes (*e.g.* Mitchell[1] *et al*. 2013b; Murray *et al*. 2016). This rise in providing health information digitally has been possible due to rapid advances in technology and increased coverage of mobile cellular networks, with individuals living in both developed and developing countries now frequently accessing digital information and support (WHO 2011). A recent review of healthy eating interventions delivered to families in the home environment revealed that seven of the 39 studies (18%) had implemented an mHealth intervention (Snuggs *et al*. 2019). Boswell *et al*. (2019) recently explored parents' willingness to participate in online and social media-based interventions in 330 Australian parents with a 2-5 year-old. They found that the preferred method of intervention participation was a combination of online platforms (websites, email, Facebook) and concluded that online interventions are an acceptable alternative to traditional interventions. Mothers also report using the internet and social media as frequent, trusted sources of information about parenting and child health, although they are aware of the need for caution about the credibility of

such information (Moon *et al*. 2019). Digital health interventions typically address some of the common barriers to participating in more traditional health interventions, such as time, location and childcare factors (*e.g.* Virudachalam *et al*. 2016). As such, digital health interventions offer a promising way to intervene with parents and caregivers to support their child feeding practices.

Together, the evidence highlights a need to better support parents and caregivers with promoting healthy eating behaviours in their children. Given that eating habits developed early in life typically track with children into adolescence and adulthood (Mikkilä *et al*. 2005), there is value in supporting this development in families of young children. The use of controlling feeding practices is common, yet they often have unintended consequences for children's eating behaviours and so educating and supporting parents and caregivers around their child feeding practices is an important area of intervention. Given recent increases in technology and eHealth/mHealth interventions (Murray *et al*. 2016; Ofcom 2019; Snuggs *et al*. 2019), providing this support digitally would seem a parsimonious yet effective way to reach a range of families.

Development of the Child Feeding Guide digital support resource

To address the identified gap in credible, accessible support for parents and caregivers around feeding children and promoting children's healthy eating behaviours, we developed the Child Feeding Guide (www.childfeedingguide.co.uk/), a freely available website and web app which aims to provide parents/caregivers (and now, also, health and childcare professionals) with a repository of evidence-based information and support (in the form of advice and recommendations) to support child feeding and improve children's eating behaviours. A digital format was adopted given recent increases in eHealth and mHealth as sources of information and the ability for online support to reach a wide variety of recipients, irrespective of geography, age and socio-economic status (*e.g.* Brodie *et al*. 2000). Evidence suggests that interactive interventions which use technology to deliver education and support may be effective at enhancing understanding and providing support while also being low cost to deliver and maintain (Mitchell *et al*. 2013b).

The Child Feeding Guide focuses on the common feeding pitfalls that families encounter (*i.e.* children's food refusal and unhealthy food preferences) and

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parent/caregiver use of pressure for children to eat, food as a reward, and restriction of food. It explains **what** each pitfall is, **why** it occurs and shares advice (based on research findings) about **what to do** when the pitfall is encountered. The Child Feeding Guide aims to support parents/caregivers to reduce their use of controlling feeding practices (*i.e.* pressure, restriction, using food as a reward) and, instead, to implement recommended practices to promote children's food intake (*e.g.* repeated exposure, role modelling). To promote user engagement, the Child Feeding Guide is interactive (Hekler *et al.* 2016). Users can track and monitor their feelings and their child's emotions around mealtimes over time. They can also use tools to monitor progress with introducing new foods. All content in the Child Feeding Guide has been written by child feeding experts and iteratively refined with feedback from parents/caregivers, health and childcare professionals, and family charities.

The Child Feeding Guide is underpinned by research evidence and by several theories of behaviour change. Throughout the Child Feeding Guide, information is provided for users about the link between behaviour and child health, and the consequences of parent or child behaviours are explained, as per the Informational Motivational Behavioural Skills Model (Fisher *et al.* 2003). This explains the reason behind making suggested changes and acts as a motivator for behaviour change. Self-Determination Theory posits that fostering autonomy facilitates learning (Ryan & Deci 2000). By giving users personal choices throughout the intervention (as in the Child Feeding Guide, where there is no expectation that users engage with every aspect; only those which they feel are applicable), this is intended to motivate users' engagement with the resource (Ryan & Deci 2000). Finally, improving parents' self-efficacy around child feeding is vital given evidence that those with high self-efficacy are more likely to view difficult tasks, such as improving their child's diet, as something that they can master rather than something to be avoided (Bandura 1977). Self-efficacy refers to an individual's confidence in their ability to achieve results. Parents commonly report feeling anxious or concerned about their child's eating and/or weight (Mitchell *et al.* 2013b) which can result in the use of inappropriate feeding practices and an inability to see improvements when they occur. Therefore, the Child Feeding Guide incorporates interactive tools which allow users to track and monitor changes in behaviours, as well as educating and empowering them to manage their child's feeding behaviours, and thereby boosting their own self-efficacy.

Is use of the Child Feeding Guide associated with improved feeding practices or reductions in anxiety?

To understand about the potential benefits that might be linked to using the Child Feeding Guide, we conducted an initial evaluation to explore whether there were any changes in parents' feeding practices and/or general anxiety levels after engaging with the Child Feeding Guide over a 4-week period. To do this, we recruited parents/caregivers of young children via nursery schools and social media sites. Ethical approval was granted by Loughborough University's Ethical Approvals (Human Participant) Sub-Committee. Twenty-nine mothers took part but four of these (14%) reported that they did not use the Child Feeding Guide and so had to be excluded from the evaluation analysis. This left 25 mothers of 14 male and 11 female children aged 6 months to 4 years (mean 27 months, SD 14.45). The mean age of the mothers was 35 years (SD 4.72, range 27–47 years), and 72% described themselves as White/Caucasian and 80% had a degree-level qualification. Most (92%) of the mothers described themselves as the main provider of meals for their child, with mothers reporting being present for mealtimes on average 17 times per week (range 3–21 meals).

Parents/caregivers were invited to take part in a project which aimed to explore the effectiveness of a digital tool (the Child Feeding Guide) to help them with feeding children and establishing children's healthy eating behaviours. They were invited to complete a short survey looking at their child feeding practices at baseline (T1). Participants were then emailed a detailed summary about the digital support resource. This summary explained how they could access the resource and highlighted some of the benefits that could be obtained from it (*i.e.* tips to help them and their child enjoy happy, healthy mealtimes; tools to help them track their child's eating behaviour; advice on how to avoid common feeding pitfalls; and ideas for ways to have fun with food). Participants were asked to use the digital support resource as much as they wished over the next 4 weeks. This approach was chosen to mirror participants' naturalistic interactions with digital support resources and the way in which it was envisaged that the Child Feeding Guide would be used.

After 4 weeks, participants were emailed a link to a follow-up (T2) survey and completed the same measures as at T1. They were also asked to provide feedback on the digital resource. All participants who

completed both surveys were entered into a prize draw to win one of several high street shopping vouchers to thank them for their time.

Measuring changes

The first survey requested background/demographic information from the participants (*e.g.* caregiver and child age and gender, and caregiver ethnicity and education level) as well as information about how often the caregiver eats with the child. As part of both the first (T1) and the follow-up (T2) surveys, participants were asked to provide information on their child feeding practices and anxiety levels by responding to questions from two standardised, valid and reliable questionnaires, as summarised below.

Feeding practices

The Comprehensive Feeding Practices Questionnaire (CFPQ) (Musher-Eizenman & Holub 2007) assesses the child feeding practices used by parents/caregivers. Five of its 12 subscales were used in this evaluation as they most closely relate to the content of the digital support information provided to participants. The five subscales were as follows: Pressure (4 items) – use of pressure for the child to consume more food at meals; Restriction for weight control (8 items) – control of the child's food intake with the purpose of decreasing or maintaining the child's weight; Restriction for health (4 items) – control of the child's food intake with the purpose of limiting less healthy foods and sweets; Food as a reward (3 items) – use of food as a reward for the child's behaviour; and Modelling (4 items) – assessing parental modelling of healthy eating in front of the child. Responses are averaged, and higher mean scores for each subscale show greater use of that feeding practice.

Parent/caregiver anxiety

Seven items of the Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith 1983) assess symptoms of anxiety (*e.g.* 'Worrying thoughts go through my mind'), and these questions were completed by participants in the current evaluation. The responses are summed, with higher scores indicating greater symptoms of anxiety. Despite its name, this measure is well used in general population samples (*e.g.* Bjelland *et al.* 2002).

Did parents use the Child Feeding Guide digital health resource?

Participants were asked whether they had used the digital resource (yes/no) and, if they had, approximately how many times they did so over the 4-week period (options given were: 1–5, 6–10, 11–15, 16–20, more than 20 times). Four (14%) of the mothers who took part in this evaluation reported not using the Child Feeding Guide during the 4-week window. All of the remaining 25 participants reported that they had used the Child Feeding Guide website or app during the intervention period; most mothers (64%) reported using it 1–5 times, 32% used it 6–10 times, and 1 person (4%) reported using it 11–15 times.

Changes in child feeding practices and parents' anxiety levels

Mothers' initial feeding practices and anxiety levels (T1) were compared with their reports of these at follow-up (T2) using paired sample *t*-tests to explore whether any changes that occurred over time were statistically significant. The results can be seen in Table 1.

Mothers who used the Child Feeding Guide reported using significantly less pressure to eat and restriction of food for weight reasons at 4-week follow-up. Given that pressure to eat and overt restriction of food can disrupt the development of children's autonomy around eating (*e.g.* Birch *et al.* 2001; Wardle *et al.* 2005), it is promising to see that mothers

Table 1 Descriptive statistics and results from paired sample *t*-tests to explore any changes in mothers' child feeding practices and anxiety levels

	Baseline (T1) Mean (SD)	Follow-up (T2) Mean (SD)	Paired *t*-test t score
Comprehensive Feeding Practices Questionnaire			
Pressure to eat	3.30 (0.81)	2.96 (0.83)	**2.14***
Restriction of food for weight reasons	2.18 (0.65)	2.00 (0.62)	**2.25***
Restriction of food for health reasons	3.38 (1.04)	3.19 (1.00)	1.15
Food as reward	2.12 (1.04)	2.05 (1.02)	0.41
Modelling of food intake	4.28 (0.89)	4.42 (0.82)	−1.59
Hospital Anxiety and Depression Scale			
Parental anxiety	7.40 (3.88)	6.04 (3.88)	**2.36***

*$P < 0.05$ (statistically significant change over time).

used lower levels of these behaviours after learning about them, and about suggestions for alternative behaviours, from the Child Feeding Guide. Although previous research has demonstrated that intensive paediatric obesity interventions can result in reductions in the use of controlling parental feeding practices (Wilson *et al.* 2019), feeding practices are engrained behaviours which can be very difficult to change even in intensive lifestyle interventions taught to families at home (*e.g.* Morshed *et al.*, 2019). It is therefore very encouraging to find reductions in mothers' use of controlling feeding practices in this sample which could have come about through naturalistic engagement with this low-cost, digital resource which is widely available and easily accessible for families.

Maternal reports of anxiety also significantly decreased over time. Concerns around children's eating habits, fussy eating or food refusal behaviours are common in parents (*e.g.* Coulthard & Harris 2003; Norman *et al.* 2015; Daniels 2019). Maternal anxiety may result from concerns around children's diet and fussy eating but may also exacerbate the use of controlling and emotional feeding practices which are counterproductive (*e.g.* Farrow & Blissett 2005; Hardman *et al.* 2016). Reducing high levels of maternal anxiety is an important aim in its own right given the burden that results from living with anxiety and the impact that it can have on parent and child wellbeing (Hakanen *et al.* 2019). In terms of child feeding behaviour, maternal anxiety has also been shown to be associated with the use of controlling feeding practices (*e.g.* Farrow & Blissett 2005; McPhie *et al.* 2014; Haycraft 2020) and may be a barrier to resolving feeding problems (Coulthard & Harris 2003), so it is promising to see a reduction in mothers' general anxiety levels in those who engaged with the Child Feeding Guide. What is unclear is whether maternal anxiety is lowered directly as a result of using the Child Feeding Guide, and some of the reassurances that this may bring, or whether reductions in controlling feeding practices are leading to reduced maternal anxiety. Additional research is needed to explore the nature of these relationships further.

There were no significant changes over time in mothers' reported use of restriction of food for health reasons, use of food as a reward or modelling of food intake, although it is noteworthy that mean scores at T2 for restriction for health and food as a reward were lower than at T1, whereas modelling was higher; findings which are all in the expected direction. Restricting food for health reasons might be more challenging to reduce as it could still be seen by some parents as a good, well-intended practice to employ. In this sample, mothers' use of food as a reward was low at baseline (T1), yet changing habits (*e.g.* offering palatable foods in exchange for a behaviour; a practice which is known to be highly effective) might require a slightly longer time period to become embedded than this research allowed. Finally, role modelling requires the opportunity for families to eat together which might be harder to change in a relatively short time period (~4 weeks) due to logistical issues like parents' existing work commitments.

What did users think about the Child Feeding Guide?

Participants were asked whether they felt that using the Child Feeding Guide digital support resource had influenced or changed the way they feed their child/children (yes/no/not sure) and whether the information in the digital support resource helped them to understand their child's eating behaviour better (yes/no/not sure). The majority (72%) of mothers said that the information in the Child Feeding Guide had 'helped them to understand their child's eating behaviour better' (16% said they were unsure and 8% said it had not), and 52% of mothers reported that the Child Feeding Guide had 'influenced or changed the way that they fed their child or children' (24% said it had not and 24% said they were not sure).

Mothers were also given the opportunity to state (using free-text responses) which aspects of the Child Feeding Guide they found most useful or liked the most. Overall, the 'common feeding pitfalls' and 'tips and tools' sections were reported as being the most useful and well-liked. Mothers also reported that advice on offering new foods (repeated exposure) was useful, with one mother writing: 'I didn't realise it might take 20 attempts!' [M09]. Other mothers provided feedback about the credibility of the information: 'Knowing what is normal is reassuring. There are lots of opinion based websites that are not based on fact which can be misleading when looking for information' [M22]. This was mirrored by another mother who described how it was 'reassuring that the advice has a genuine medical basis rather than a personal opinion of a stranger' [M14] and a further mother who liked the '…advice it offered with practical and realistic methods' [M11]. Mothers also commented that they valued the explanations for behaviours, for example 'The 'Why' part of each theme is also interesting and educational' [M06]. Others stated that they valued information about the use of rewards. For

example, one explained: 'I didn't realise how much I used food as a reward so these have been great to change that' [M21]. Another reported that the Child Feeding Guide had proved useful as it 'makes you aware of how your eating behaviours might be inadvertently affecting your child' [M14]. From a practical perspective, mothers reported valuing 'The fact that it is easy to use' [M03] and that it was 'well laid out and [in an] easy to follow format' [M22].

Overall, in terms of evaluating participants' use of, and views on, the Child Feeding Guide as a digital support intervention, the findings suggest that most mothers who used the Child Feeding Guide found that the information within it aided their understanding of their child's eating behaviour and approximately half felt it had changed their child feeding practices or interactions. Mothers reported finding the Child Feeding Guide easy to use. They also identified a number of aspects of the Child Feeding Guide which they valued and/or found beneficial, including the credibility of the resource, the reassurances provided, the explanations of behaviours (what/why/what to do) and the inclusion of practical alternative suggestions. This evaluation aligns with evidence surrounding the increased acceptability and use of the internet as a source of parenting and child health support (Moon *et al.* 2019). Together, these initial findings suggest good engagement with the Child Feeding Guide and that participants recognised numerous benefits from engaging with the digital support resource.

Mothers were also invited to share ideas for what, if anything, could be improved about the Child Feeding Guide. Several mothers indicated that nothing could be improved [*e.g.* 'nothing' (M20); 'N/A' (M23)]. Others suggested additional information that they would like, for example 'Maybe add to it by putting in recipes for meals and snacks' [M11] and having 'An additional forum for parents to ask questions to other mums and which is monitored by professionals' [M03]. Two mothers [M14, M24] suggested adding more information about dealing with children who are slow eaters: 'More tips on children who take a long time to eat' [M24]. Finally, one mother suggested that it would be good 'to keep it updated' [M19].

While some of these suggestions duplicate information provided elsewhere or are beyond the scope of the Child Feeding Guide (*e.g.* recipes) or the resources available (*e.g.* to run a forum), adding further information about slow eaters and keeping the information up-to-date are easy to address. Indeed, the final point has already been addressed as the Child Feeding Guide was initially available as a mobile app (for iOS and Android devices), but these have since been withdrawn due to difficulties and costs associated with keeping information current. The content of the Child Feeding Guide is now all controlled and updated centrally by the research team and accessed by users via the website and web app, meaning that edits and updates in response to new research findings can be swiftly implemented.

Conclusions

Mothers of pre-schoolers who engaged in naturalistic use of the Child Feeding Guide digital support resource over 4 weeks reported lower use of pressure to eat and restriction of foods for weight reasons, and fewer symptoms of maternal anxiety. This is a promising evaluation of the Child Feeding Guide given its use by over 80 000 parents, caregivers and professionals. These findings are likely to be of particular interest to health professionals (*e.g.* health visitors, GPs, dietitians, school nurses) who work with families to support healthy eating behaviours in children. The findings are also likely to be relevant to childcare professionals (*e.g.* nursery/day-care staff and childminders) who have a responsibility for feeding children. Online training for these professionals is also available via the Child Feeding Guide to provide further support. It is noteworthy that this evaluation did not include a control group and that the sample comprised mostly White, well-educated mothers. Future research is required to address these limitations and to determine whether the Child Feeding Guide can yield similar results in more socio-demographically diverse families. Moreover, this evaluation has not explored the role of child factors, such as temperament or appetite avidity, in parents' use of feeding practices and this also warrants exploration in future to ensure that such health interventions are tailored according to relevant child characteristics.

Overall, these findings show initial promise for the Child Feeding Guide to contribute to reductions in mothers' use of controlling feeding practices and to reduce symptoms of maternal anxiety. Such behaviour changes are important as they are likely to help promote healthy eating behaviours (*e.g.* greater intake of a wider array of foods) in young children, thereby supporting them to establish healthy habits from the early years.

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Conflict of interest

The authors are co-creators of the Child Feeding Guide. It is freely available as a website and web app and is based on research evidence. The authors report no conflict of interest.

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