

# Feeding Minds: Exploring How Adults Shape Children's Perceptions of Food through Everyday Conversations

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## Abstract

This study explores the dynamics of food-related discourse between adults and children in British families, utilizing the CHILDES (Child Language Data Exchange System) database to analyze naturally occurring conversations. By employing corpus linguistics, natural language processing (NLP), and data science methods, the research examines how food is discussed, identifying patterns in vocabulary use, conversation initiation, and the linguistic framing of eating behaviours, which can exert lasting influences on future wellbeing. The findings reveal that the food-related vocabulary of children and adults mostly overlaps, centring around staple foods. However, there are notable differences: children frequently mention sweet foods and express desires for them, whereas adults use a broader and more sophisticated vocabulary, including terms related to meal preparation and diverse cuisines. Notably, although children place particular emphasis on sweet foods, adults too frequently mention them highlighting that both groups engage with sugary treats, albeit with different discursive functions. Moreover, adults are nearly twice as likely as children to initiate food-related conversations, reinforcing their role as primary facilitators of food discourse. An analysis of the different usages and patterns of the verb *eat* highlights the instructional and regulatory nature of adult speech, with frequent use of imperatives emphasizing that children must finish their food, and conditional statements linking eating to rewards or consequences. These patterns suggest that adults may shape children's perceptions of portion sizes, satiety, and mealtime behaviour through epistemic primacy. Additionally, gendered differences in food-related praise reflect broader cultural expectations, with boys receiving more frequent positive reinforcement for eating.

**Keywords:** food-related discourse, eating behaviours, corpus linguistics, nutrition communication, food vocabulary, adult-child interactions

## 1. Introduction

Humans have a notoriously complex and intricate relationship with food, involving physiological, cultural, social, and psychological factors. Food is not merely a biological necessity but a central component of identity, culture, and social interactions (Fischler, 1988; Rozin, 2006). This multifaceted connection begins developing early in life as children start to navigate their environment and establish their preferences, and continues to evolve throughout an individual's lifespan (Birch, 1999; Vereijken, Weenen, & Hetherington, 2011; Nicklaus, 2016). Thus, childhood is a particularly critical period for developing long-lasting eating habits and food preferences, many of which persist into adulthood and influence dietary choices and overall health (Ventura & Worobey, 2013).

Understanding the early relationship with food is of utmost importance, as early food experiences are foundational not only to long-term physical health but also to overall wellbeing, influencing emotional and social dimensions of health throughout the lifespan. This is particularly significant given that eating habits formed in childhood often persist into adulthood, thereby increasing the risk of obesity-related health complications later in life (Reilly & Kelly, 2011; Simmonds, Llewellyn, Owen, & Woolacott, 2016). In addition to obesity, disordered eating patterns and clinical eating disorders also have strong roots in early childhood experiences with food. Research suggests that parental feeding practices, food-related discourse, and the emotional climate surrounding meals play a crucial role in shaping children's attitudes toward eating and body image (Bruch, 1973; Rodgers, Wertheim, Damiano, Gregg, & Paxton, 2018; Herle et al., 2020). For example, overly restrictive feeding practices, pressure to eat, or the use of food as a reward can contribute to dichotomous thinking about food (e.g., good vs. bad foods), which is a risk factor for the later development of anorexia nervosa, bulimia nervosa, and binge-eating disorder (Palascha,

van Kleef, & van Trijp, 2015; Costa & Oliveira, 2023). Moreover, exposure to weight-related comments from caregivers and peers has been linked to body dissatisfaction and disordered eating behaviours in adolescence and adulthood (Neumark-Sztainer et al., 2010; Puhl & Suh, 2015).

Although the dynamics of a child's relationship with food are influenced by numerous factors, including biological predispositions, media exposure, and socio-cultural norms (Scaglioni et al., 2018), one crucial aspect is the way in which parents and other adults speak about food, both directly and indirectly, in the presence of children. The discourse surrounding food plays a significant role in transmitting cultural norms, shaping children's attitudes toward eating, and reinforcing particular values and expectations related to diet and nutrition. Therefore, gaining insight into the kind of discourse children are exposed to when they are around adults is essential for understanding how they internalize messages about food.

Numerous studies have explored children's relationship with food and the role of parental influence, primarily relying on qualitative methods. One common approach has been the use of questionnaires to assess both children's dietary behaviours and parental feeding practices (Wardle, Guthrie, Sanderson, & Rapoport, 2001; Carnell & Wardle, 2007; Ek et al., 2016). While these studies have provided insights into eating habits and caregiver influences, they mainly capture individual perspectives rather than the interactive, social aspects of food discourse. To address this limitation, ethnographic studies have examined food-related interactions within family settings, offering a more dynamic view of how children's attitudes toward food are shaped. Ochs and Shohet (2006), for example, analyzed family meal interactions across cultures and found that food talk often carried moral and emotional undertones, reinforcing cultural values such as discipline, gratitude, and self-control. Their study highlighted that children learn not just what to eat but also how to feel about eating through adult discourse. Expanding on this, Blissett, Haycraft, and Farrow (2010) conducted structured meal observations and found that parental behaviours, such as pressuring children to eat or using food as a reward, were associated with greater resistance and negative emotional responses, demonstrating how parental feeding strategies influence children's emotional relationship with food. Beyond parental influence, some studies have sought to understand how children themselves conceptualize food and eating. Elliot (2011) used child-centred focus groups to explore children's perceptions of 'kids' food' versus 'adult food', finding that children associated unprocessed foods such as fruits, vegetables, and meats with adults, while viewing processed, high-sugar, low-nutrient foods as intended for them. Similarly, Schur, Sanders, and Steiner (2000) found that children as young as eight displayed early signs of diet-consciousness, particularly in families where weight and body image were frequently discussed. These findings suggest that children actively construct their own food-related identities, influenced not only by parental discourse and feeding practices but also by broader social and cultural narratives.

While qualitative studies have been invaluable in highlighting not only parental influences on children's food perceptions but also the social dynamics of family meals, children's own food-related attitudes, and the broader cultural narratives surrounding food, they share two key limitations. Firstly, they typically rely on self-reported data, retrospective accounts, or structured observations, which may not fully capture the spontaneous and implicit ways in which food-related messages are transmitted and received in everyday conversations. Secondly, they involve research settings where food is often the central theme of discussion, which may prime participants to provide socially desirable responses rather than capturing naturally occurring discourse on food in everyday interactions.

To address these limitations, this study draws on perspectives from discourse analysis and conversation analysis to examine how language contributes to the socialization of eating behaviours in the CHILDES (Child Language Data Exchange System) corpus (MacWhinney, 2000). Within these frameworks, talk is not merely a reflection of attitudes but a primary means through which social norms, values, and identities are constructed and negotiated (Tannen, 1989; Fairclough, 1995). Everyday conversations around food can be understood as sites of interactional work, where adults use linguistic strategies not only to manage behaviour but also to reinforce cultural understandings of food, health, and morality (Brown & Levinson, 1987; Drew & Heritage, 1992). In this sense, food discourse operates as a vehicle for social control and value transmission, particularly within asymmetrical interactions between adults and children. By focusing on naturally occurring conversations, this study situates itself within a discourse-analytic tradition that foregrounds the role of language in shaping social experience.

This analytical approach aligns well with the affordances of CHILDES, a corpus primarily used to study language acquisition, but which also holds considerable potential for exploring broader aspects of caregiver-child interaction. Up to the present, very few studies have leveraged this potential. Forrester (2002), for instance, examined how children appropriate culturally available identities, while Wiggins (2014) focused on the use of evaluative expressions like *love*, *like*, and *don't like* in the negotiation of food preferences. While these studies demonstrate that CHILDES can offer insights beyond language development, they rely on only small portions of the dataset

and adopt a discursive psychology perspective. In contrast, the present study offers a large-scale, corpus-based analysis of “foodspeak” across a diverse set of interactions. By combining discourse-analytic insights with methods from corpus linguistics and NLP, it aims to identify key patterns in how adults and children talk about food, including vocabulary use, conversation initiation, and the linguistic framing of eating behaviours.

## 2. Method

### 2.1 Dataset Creation and Preprocessing

The CHILDES database is a widely recognized resource for child language research and is a component of the broader TalkBank system, compiled for the study of language. It provides a rich collection of transcriptions, audio, and video recordings of children’s spontaneous speech and interactions with adults. The datasets included in CHILDES are from 26 languages and encompass various types of data, such as longitudinal studies that track language development in the same child over time and cross-sectional studies that capture language use among children at similar developmental stages. They also contain naturalistic speech recorded in everyday settings like homes, schools, and playgrounds, along with parent-child interactions that offer insights into how caregivers influence language acquisition. Additionally, some transcripts originate from experimental tasks, including word-learning experiments and structured storytelling.

Transcripts are in CHAT (Note 1) format and contain annotations, among which part-of-speech tagging and syntactic structures, as well as other data such as participants and type of situation. For the present study, we restricted the analysis to the UK section of CHILDES to ensure cultural consistency, drawing on a subcorpus that spans several decades (from the early 1970s through the mid-2010s) thus providing a rich temporal framework. We extracted the 1,725 available CHAT files and employed the Python libraries pylangacq (Note 2), Natural Language Toolkit (NLTK) (Note 3), and spacy (Note 4) to access, parse, and extract relevant linguistic information. To structure the data efficiently, the extracted content was converted into a dataframe through the Pandas (Note 5) library, merging consecutive utterances from the same speaker within the same file to ensure coherence in conversational turns.

The dataset contained 197 unique speaker labels, necessitating careful classification. CHILDES typically uses standardized labels for participants, such as CHI for the primary target child in each conversation, MOT and FAT for parental caregivers, and SIS and BRO for siblings. However, inconsistencies were encountered in 77 cases, where only a proper name (e.g., Rebecca (REB)) was provided without an explicit role designation. To resolve this, we manually examined utterances associated with these labels, identifying child-like structures and content to determine whether the speaker was a child or an adult. For classification purposes, CHI, SIS, BRO, and other child-associated labels were grouped under the ‘child’ category. Proper noun labels, such as STU and REB, that exhibited child-like utterances were also assigned to the ‘child’ category. All remaining labels were assigned the ‘adult’ category. This allowed us to estimate the number of children in the UK dataset at a minimum of 280, though some ambiguities remain due to labelling inconsistencies common in large-scale, long-term linguistic corpora (Note 6).

Each utterance was tokenized, lemmatized, and assigned a part-of-speech tag extracted from the transcripts. The final dataset consisted of 1,656,296 rows with each row representing an utterance. The dataset included the following columns: utterance (what the speaker said during their conversational turn), tokens (the tokenized utterance), lemmas (the lemmatized utterance), part-of-speech (grammatical information on the utterance’s tokens), speaker (the speaker’s label), type of speaker (‘child’ vs. ‘adult’), and source file (name of the file in which the transcript was saved).

Using the ‘type of speaker’ column, we divided the data into two smaller datasets: one containing all utterances produced by children along with their corresponding data, and another including all utterances from adult speakers. The resulting subcorpora comprised 780,574 utterances for children (CC) and 875,722 utterances for adults (AC), reflecting a substantial volume of conversational data for analysis. In terms of token counts, CC was made up of 4,588,988 tokens, while AC contained 11,045,049 tokens. The linguistic analysis was conducted using NLTK for text processing and concordance display (Note 7), and AntConc (Anthony, 2024) for n-gram and collocation extraction.

### 2.2 Food-related Keyword List Generation

In order to identify utterances containing food-related terms, we compiled a word list from two primary sources: the Australian Food Composition database (Note 8) and the Wikipedia List of Foods (Note 9). From the former, we extracted food names from the ‘food name’ column, resulting in an initial set of 1,561 food items. However, due to variations in how foods were labelled, some items required standardization. For instance, multiple

descriptors such as *salt, table, iodised* and *salt, table, non-iodised* were consolidated into the term *salt*. After this standardization process, a total of 356 unique food names were retrieved.

To complement the Australian Food Composition database, we extracted food terms from Wikipedia in order to ensure broader coverage of commonly referenced foods. Indeed, while the Australian database provides a comprehensive list of categorized food items, it is primarily designed for nutritional analysis rather than linguistic research. As a result, it may omit colloquial or culturally significant terms that frequently appear in everyday discourse. Conversely, the Wikipedia List of Foods includes a diverse range of foods from various cuisines and contexts, reflecting how food is commonly discussed outside of scientific or nutritional classifications. Additionally, since Wikipedia is collaboratively maintained and regularly updated, it is a valuable source for capturing contemporary and widely recognized food terminology. From the page, we extracted 140 unique food-related words through the Python library BeautifulSoup (Note 10). The lists from both sources were then merged, resulting in a final set of 443 unique food items that served as the basis for identifying food-related utterances within the CHILDES dataset.

It is important to acknowledge that some of the food-related terms are polysemous. For example, *fish* may refer to both an animal and a food item, *water* can denote both a beverage and a body of water, and *tea* could be mentioned in reference to a meal rather than a drink. Given the limitations of automatic text processing, there is no fully reliable method to disambiguate these instances within the corpus. Consequently, some frequency counts may inadvertently include non-food-related occurrences of these terms. Such limitations have been taken into account when interpreting the results.

### 3. Results

#### 3.1 Comparing Food-related Vocabulary

We computed the frequency of each food-related term in both CC and AC, generating two separate frequency wordlists and identifying 198 unique food terms in the former and 220 in the latter. Since the two corpora differ in size, in order to be able to compare word frequencies across corpora, we applied normalization by total number of tokens and multiplied the figures by 1,000,000. The normalized results will henceforth be expressed per million words.

Table 1. Most frequent food-related nouns in adult and child speech

| RANK | FOOD TERM | FREQUENCY IN AC | FOOD TERM | FREQUENCY IN CC |
|------|-----------|-----------------|-----------|-----------------|
| #1   | water     | 409.50          | water     | 500.11          |
| #2   | tea       | 396.01          | tea       | 402.05          |
| #3   | cake      | 272.70          | juice     | 383.74          |
| #4   | milk      | 256.76          | egg       | 333.84          |
| #5   | egg       | 250.42          | cake      | 324.03          |
| #6   | apple     | 240.20          | milk      | 286.11          |
| #7   | juice     | 219.65          | fish      | 280.24          |
| #8   | fish      | 201.90          | apple     | 260.84          |
| #9   | cheese    | 179.27          | duck      | 229.68          |
| #10  | chocolate | 168.31          | cheese    | 218.57          |
| #11  | duck      | 167.49          | chocolate | 214.42          |
| #12  | orange    | 161.70          | rabbit    | 209.19          |
| #13  | biscuit   | 159.61          | chicken   | 203.09          |
| #14  | chicken   | 143.86          | sausage   | 186.09          |
| #15  | bread     | 142.42          | biscuit   | 178.03          |

An analysis of the top food-related terms in the adult and child corpora reveals a strong lexical overlap, suggesting that both groups draw on a common vocabulary when talking about food. As shown in Table 1, the most frequently mentioned terms are mostly shared and represent everyday foods that are central to domestic eating routines, including staple items (*milk, egg, fish*), common drinks (*water, tea, juice*), and popular treats (*cake, chocolate*). Such overlap not only reflects the centrality of certain foods in everyday life, but also suggests that these items emerge organically in family conversations in which both adults and children participate. Their recurrence across both corpora highlights the collaborative nature of food discourse in the home, where children and adults routinely refer to the same culturally salient items. While this convergence is perhaps to be expected, it makes the divergences in how food vocabulary is used all the more revealing and analytically valuable. To investigate these

differences, we conducted statistical tests (Note 11) on word frequencies to assess whether variation in food-related vocabulary usage between adults and children was significant. Several words were found to occur with significantly greater frequency in child speech compared to adult speech, including some that rank high in both corpora. One notable example is *juice*, which appears 383.74 times per million words in CC and 219.65 in AC, indicating that *juice* is a more prominent topic in children's discussions. Such higher frequency is likely linked to children's appreciation of the beverage and its frequent consumption, possibly reinforced by the widespread belief that, being fruit-based, juice is a healthy choice. Indeed, the verb that most often collocates with *juice* in CC is *want* (139 occurrences), often appearing in patterns such as *want some juice*, *want some more juice*, and *want more juice*, highlighting the frequency with which children request the beverage.

Similarly, the lemmas *cake* (CC: 324.03, AC: 272.70), *chocolate* (CC: 214.43, AC: 168.31) and *lolly* (CC: 52.08; AC: 25.53) are significantly more common in child speech, reflecting children's great interest in sweet treats. As with *juice*, the most frequent verbal collocates of all three terms are *want* and *have*, indicating that children are the ones most often making requests to consume these foods. Other nouns that children mention significantly more often are the fruits *pear* (CC: 100.89; AC: 69.35) and *strawberry* (CC: 98.71; AC: 67.99).

Animal-related food terms such as *fish* (CC: 280.24; AC: 201.90), *rabbit* (CC: 209.20, AC: 144.77), *duck* (CC: 229.68, AC: 167.50), and *goat* (CC: 64.94, AC: 33.95) are also more prevalent in child speech. Given the polysemous nature of these words, we analyzed their collocational patterns to determine whether their usage was primarily food-related. While *fish* appears in both senses, its predominant use is food-related, as evidenced by frequent collocates such as *fingers* (49), *chips* (26), *salmon* (10), and *tuna* (8). On the contrary, other animal-related terms, such as *rabbit*, *duck*, and *goat*, predominantly occur in reference to the animals themselves. This is supported by their most frequent collocates: *rabbit* commonly appears with *bunny* (75) and *Peter* (37), *duck* with *Donald* (26), *Dippy* (17), and *quack* (32), and *goat* with *Billy* (31), *cow* (26), and *sheep* (12).

Both *egg* (CC: 333.84; AC: 250.43) and *sausage* (CC: 186.10; AC: 134.45) are proportionally more frequent in children's speech. Examining the collocations of *egg* in both AC and CC revealed that while the noun is often referenced as a food item (e.g., in combinations such as *scrambled egg* (AC: 43, CC: 12), *boiled egg* (AC: 41; CC: 8), and *fried egg* (AC: 20; CC: 5)), *egg* is also frequently mentioned as part of the compound *Easter egg* (AC: 74; CC: 25). The prominence of this latter usage in child speech further underscores children's strong association with sweet foods, indicating that their references to *egg* may often relate to confections as well as to everyday meals.

While the food terms mentioned by children tend to be familiar, everyday foods, adult discourse incorporates not only common words like *yoghurt* (AC: 60.48; CC: 29.20) and *cereal* (AC: 28.15; CC: 14.60), which appear with significantly greater frequency, but also a more varied and, at times, sophisticated vocabulary. Indeed, AC includes several food-related words that are entirely absent from child speech. Among these are *baguette* (0.09), *couscous* (0.09), *chickpea* (0.36), *lasagna* (0.27), *poultry* (0.09), *swede* (0.09), *paprika* (0.36), *nutmeg* (0.36), *oregano* (0.09), *coriander* (0.09), *mandarin* (1.90), *parmesan* (0.09), *rye* (0.45), *cod* (0.18), *whopper* (0.18), *pikelet* (0.18), *thyme* (0.54), *parsley* (0.45), *fennel* (0.09), *starch* (0.36), *quince* (0.36), and *brie* (0.18). Many of these terms relate to specific ingredients, international cuisines, and seasonings, which suggests that adults – as expected – display a broader and more complex vocabulary related to cooking, food preparation, and dietary choices. The absence of these words in child speech indicates that children may not yet be familiar with these food words or that the foods themselves are less relevant to their everyday conversations.

### 3.2 Initiation of Food Conversations

The initiator of a conversation about food plays a key role in shaping both the interaction itself and the kinds of food discussed. Moreover, analyzing which foods are first mentioned provides insight into the typical foods that adults propose and those that children seek out. To determine who typically initiates food discussions, we filtered the general dataset by identifying the first mention of each food-related term in every conversation. The results show that adults are more likely to introduce food-related topics than children with 18,991 first mentions compared to 9,760 by children. We normalized the figures by total utterances (875,722 by adults and 780,574 by children) rather than by number of tokens since the aim was to compare how often food is brought up in conversation by adults versus children, regardless of the amount of speech. Even after normalization (21 first mentions every 1,000 utterances for adults and 12 for children), adults still lead food-related discourse, initiating food topics approximately 1.72 times more often than children. These findings confirm that adults are the primary drivers of food conversations in everyday interactions.

As to the types of foods that are more frequently mentioned first, although both children and adults mention a mixture of staple foods and treats, children tend to prioritize foods characterized by a sweet taste (e.g., *cake*: 341; *biscuit*: 315; *juice*: 256; *chocolate*: 239; *banana*: 234; *strawberry*: 143; *grape*: 139; *pear*: 137; *jelly*: 80), with the

exception of *sausage* (264). The most common verbs preceding these food terms are *want* and *have*, indicating that children frequently mention these foods in the context of expressing a desire to eat them. Children also frequently first mention food terms that are associated with animals (e.g., *duck*: 326; *rabbit*: 291; *crocodile*: 218; *shark*: 74; *octopus*: 68; *crab*: 72) though, as noted earlier, unlikely in their food-related acceptance.

Adults frequently introduce sweet foods as well. Notably, the most commonly first-mentioned food by adults is *biscuit* (807). *Cake* (577), *orange* (555), *apple* (514), *banana* (420), and *chocolate* (366) are also very often brought up. However, an examination of the concordances reveals that adults do not just mention these foods in the context of offering them to children. Indeed, they also often appear within roleplay scenarios (e.g., “*Hello, Mrs. Shopkeeper, can I buy a **cake** and some cheese for Anne?*”) or in retrospective or evaluative formats (e.g., “*Well, you’ve had an awful lot of **chocolate** and chips and stuff today*”).

Moreover, adults place more emphasis on meal components and ingredients, such as *bread* (358), *potato* (197), *pasta* (127), *spaghetti* (125), *meat* (116), *cereal* (115), *onion* (119). Interestingly, children never mentioned these last foods first, with the exception of *bread* and *potato*. Other foods never first mentioned by children share a common characteristic: they are gourmet or specialty foods, making them less commonly consumed and, consequently, less likely to be frequently eaten or discussed. These include *brie*, *parmesan*, *meringue*, various herbs, seafood, and less familiar fruits and vegetables such as *mandarin*, *avocado*, and *artichoke*. However, exceptions like *chickpea* and *lentil* do not entirely fit this category, suggesting that other factors may influence their absence from children’s first mentions.

### 3.3 Significant N-grams, Collocations, and Patterns of Eat

To gain insight into how eating is discursively constructed and how eating behaviours are framed in adult-led conversation, we analyzed the verb *eat* in the AC corpus, where it occurs 10,987 times. This examination allowed us not only to identify foods that are presumably consumed more often but also to explore the linguistic contexts in which eating is discussed.

The food-related terms most frequently mentioned after the lemma *eat* are *toast* (90), *sandwich* (80), *fish* (79), *meat* (77), *cheese* (69), *cake* (66), *bread* (61), *banana* (53), *sweets* (44), *chips* (44), *sausage* (43), *biscuit* (33). This selection reveals a mixture of staple foods (bread, cheese, banana, fish) and processed or indulgent foods (cake, sweets, chip(s), sausage), suggesting that children are exposed to both nutritious and less nutritious food discourse in their environment. The prominence of *toast* and *sandwich* could also reflect that quick and convenient meals are common food choices. Analysis of the most frequent food-related collocates of *toast* (*jam*: 77, *cheese*: 66, and *marmalade*: 44) indicates that toast is a staple choice, particularly for breakfast but also as a versatile option for other meals throughout the day.

We then analyzed clusters of words occurring with *eat*. The collocation *eat + up* is the second most frequent collocation involving the verb *eat*, occurring 401 times in AC, reflecting the recurring expectation that children should finish their portion. This expectation is further reinforced by the most frequent four-word cluster, *eat it all up* (51), along with the trigrams *eat it all* (91) and *eat it up* (72), both of which emphasize portion completion. Notably, *eat it all* was the most frequent trigram, while *eat it up* ranked third, reinforcing this focus.

By examining the concordances, we identified notable occurrences of the collocation *eat + up* within if-clauses. Specifically, the pattern *if \* eat* (Note 12) appears 109 times in AC, with *you* as the subject in 96 instances and *they* in the remaining cases. The use of if-clauses in relation to eating serves two distinct pragmatic functions: one associates eating with positive outcomes, while the other frames it in terms of negative consequences. Negative consequences typically relate to health and safety (e.g., “*It’ll make you very poorly **if you eat this***”) or portion size (e.g., “*That’ll give you tummyache **if you eat too much***”), sometimes in an exaggerated manner (e.g., “*What happens **if you eat paper**? You die*”). Conversely, if-clauses that establish positive associations with eating do so in several ways: by linking food consumption to physical benefits (e.g., “*You’ll grow big and strong **if you eat this***”), by framing eating as a prerequisite for a food-related reward (e.g., “***If you eat yours up** you can have ice cream too*”), by creating an arbitrary connection between eating and unrelated activities (e.g., “*I’ll get the red car **if you eat some more***”), or by introducing a moral dimension (e.g., “*I think we should be very pleased with you, **if you eat it***”). Such clauses operate as persuasive speech acts that simultaneously instruct, motivate, and morally evaluate the child’s behaviour. In this way, conditionals contribute to the affective and moral framing of food talk, reinforcing culturally embedded expectations about eating, health, and self-regulation.

Other notable patterns involving *eat* include *eat some more* (55), *eat a lot of* (30 occurrences), and *eat a little bit* (22 occurrences). Concordance analysis shows that *eat some more* and *eat a little bit* appear very often in imperative constructions used by parents to encourage children to consume at least a portion of their food, thus functioning as mitigated directives aimed at encouraging compliance. The use of the quantifiers *some* and *a little*

*bit* softens the force of commands by implying minimal effort, thereby making the request appear less demanding and attainable. The phrase *eat a lot of* (30 occurrences) is used across a broader range of discursive contexts and performs more varied interactional work. It appears as a form of praise (e.g., “*The dentist likes it when you tell him you eat a lot of apples. And you eat a lot of fruit, don’t you?*”), it describes family habits and preferences (e.g., “*We don’t eat a lot of vegetables. Our children won’t eat vegetables, you know*”), and highlights concerns about excessive consumption of certain foods (e.g., “*If you eat a lot of sweets, what’s going to happen to your teeth?*”).

The trigrams *eat your dinner*, *eat your breakfast*, *eat your tea*, and *eat your lunch* (61, 58, 28, and 22 occurrences, respectively) are also frequent. Pragmatically, these phrases are used to encourage children to eat their meals (e.g., “*You need to eat your breakfast to grow big and strong*”), emphasize the importance of finishing their food (e.g., “*If you eat your tea all up you’ll watch Old Bear*”), or impose mealtime discipline (e.g., “*Please eat your lunch nicely*”). Indeed, these phrases frequently appear in scenarios in which children seem reluctant to eat, distracted, or negotiating alternatives (e.g., dessert or other preferred foods). In addition, they often connect meal completion with rewards or consequences (e.g., “*You don’t eat your dinner you don’t get sweeties*”). The higher frequency of *eat your dinner* and *eat your breakfast* may suggest that those meals are the ones that are most commonly negotiated or reinforced in interactions, possibly due to greater family involvement or challenges in getting children to finish them.

The way adults talk about eating also carries implicit social and behavioural expectations. Collocations like *eat + properly* (56) and *eat + nicely* (45) suggest that eating is not only about nourishment but also about manners and appropriate behaviour at the table. Notably, these expressions do not appear within conditional clauses, suggesting that they function as direct behavioural instructions rather than contingent requests or negotiations. Instead, they are frequently followed by *please*, reinforcing their role as polite yet firm imperatives aimed at guiding children’s mealtime behaviour.

Despite the instructional tone conveyed through imperatives, the frequent collocation of the verb *eat* with *darling* (105 instances) and *sweetheart* (38 instances) highlights the simultaneously nurturing and regulatory role of adults during mealtimes. These expressions perform a range of pragmatic functions. Most notably, they soften directives, mitigating the force of commands and rendering them more affectionate or acceptable, as in “*Eat your egg, sweetheart*” or “*Eat it up, darling*”. They also serve to prompt or encourage eating, often accompanying questions or offers, such as “*Do you want some more chips, sweetheart?*” or “*Would you like something to eat, darling?*”. In other cases, these terms act as forms of positive reinforcement, offering emotional validation for desired behaviour (e.g., “*You’re very good at eating sweetcorn now, darling*”). Occasionally, they are used to enforce behavioural norms or moral evaluations, particularly around food etiquette and consumption (e.g., “*Don’t eat that, darling. It’s not for you*”, “*You know you shouldn’t eat too many sweets, darling*”). Finally, such expressions appear in playful or imaginative scenarios, often blurring the boundary between care and make-believe (e.g., “*What does Winnie the Pooh eat, darling?*”, “*I’ll eat you up, darling!*”).

Other motivational phrases that occur around the verb *eat* are *good boy* and *good girl*. Throughout the whole corpus, *good boy* comes up 201 times, while *good girl* 231. Upon inspecting the concordance lines, we found that *good boy* was used 69 times with reference to boys in the context of eating (e.g., “*Good boy. You ate very well*”, “*You eat the peas now. Good boy*”), whereas *good girl* was used only 15 times in the same context (e.g., “*Good girl, you’ve eaten it up*”, “*Are you eating your pasta? Oh, good girl*”). Such a gendered difference in mealtime expectations, seems to imply that eating is more actively encouraged and positively reinforced for boys than for girls.

#### 4. Discussion

This study examined the frequency and patterns of food-related vocabulary in both adult and child speech, revealing both similarities and differences in how food is discussed across age groups in British families. The results indicate a significant overlap in the most frequently mentioned food terms, with staple foods and beverages appearing prominently in both corpora. However, the distinct emphases in each group’s vocabulary suggest underlying differences in exposure, preferences, and conversational roles.

The data reveal children’s greater focus on sweet foods and beverages, including *juice*, *cake*, and *chocolate*. This aligns with well-documented developmental preferences for sweetness, which is evolutionarily ingrained in early life (Ventura & Mennella, 2011). Notably, the frequent mention of these foods in children’s speech does not necessarily indicate high levels of consumption. Rather, it reflects their salience in conversation, likely due to their desirability. Indeed, the high frequency of the collocates *want* and *have* suggests that children primarily engage with sweet foods linguistically through expressions of desire and request-making, rather than neutral or habitual references to eating them. While children’s speech is dominated by references to desirable sweet items, adult

language reflects a broader and more multifaceted engagement with food, incorporating terms related to meal preparation, diverse cuisines, and ingredients, many of which were absent from child speech. This discrepancy highlights adults' role as the primary facilitators of food-related knowledge and decision-making, as well as their greater exposure to varied food experiences. The absence of certain words in child speech suggests that either these foods are less commonly encountered by children or that they are less relevant to their immediate eating experiences. These broader lexical patterns are reflected in specific collocational trends. For example, the presence of terms like *toast* and *sandwiches* as frequent food-related collocates of the verb *eat* suggests that quick and convenient meals are frequent food choices, particularly in the context of child-directed speech. These foods are easy to prepare, widely consumed across different household settings, and frequently associated with breakfast, snacks, or packed lunches, making them a natural part of everyday discussions in British families.

Beyond lexical preferences and collocational patterns, the structure of food-related interactions themselves also points to adults' dominant role in shaping discourse. Indeed, the data indicate that adults were nearly twice as likely as children to introduce food-related terms. This reinforces the idea that food discourse is largely shaped by adults, who act as the primary drivers of food-related interactions. While some of these conversations involved offering food to children, food was also introduced in different contexts, such as roleplay scenarios and discussions about past consumption. This suggests that food discourse serves not only practical purposes but also plays a role in broader social interactions. Crucially, adult-led interactions across the dataset reveal persistent power dynamics, most notably through epistemic asymmetries (Heritage & Raymond, 2005) in which adults consistently position themselves as more knowledgeable than children. In the context of food talk, adults typically assume epistemic primacy, using language not only to instruct or guide, but also to reinforce social norms and expectations around eating. Such linguistic behaviour has been documented in previous studies. For instance, Wiggins (2014) observed that during family mealtimes, parents often claim to know their children's food preferences, thereby positioning themselves as authorities on their children's tastes. Conversely, children's expressions of dislike are frequently challenged or dismissed by parents, reflecting an inherent power imbalance in these interactions. Similarly, van der Heijden, Te Molder, Huma, and Jager (2022) found that children from low socioeconomic backgrounds often negotiate their food preferences during meals, but their assessments are typically overridden by adults, further emphasizing the adults' epistemic authority.

In the present study, these power dynamics are especially evident in the use of imperatives such as *eat it up* and *eat it all up*. These commands exemplify adults' perceived authority to define appropriate portion sizes, reinforcing expectations that children should finish their meals. Such directives imply that children are not competent judges of their own hunger, asserting adult control over embodied behaviour and internal bodily cues. Through repeated emphasis on how much food ought to be consumed, adults may shape children's perceptions of portion sizes and help establish what is considered a "normal" or "acceptable" amount of food (Birch & Fisher, 1998; Savage, Fischer, & Birch, 2007). Over time, such verbal and behavioural reinforcement may contribute to the development of long-term eating habits by influencing attitudes toward the recognition of satiety, and even emotional responses when a meal is completed (Galloway, Fiorito, Francis, & Birch, 2006). For example, when children are repeatedly told to finish everything on their plate, they may learn to override their natural hunger cues, cultivating a mindset in which clearing one's plate becomes an obligation rather than a genuine response to hunger (Patrick & Nicklas, 2005). Conversely, when meal completion is positively framed as a desirable behaviour, these directives may act as positive reinforcement that encourages children to value finishing their food as an achievement endorsed by family norms (Fiese & Schwartz, 2008).

Further evidence of the regulatory function of adults emerges from their use of conditional constructions which, as Huddleston and Pullum (2002) note, often serve not only to express logical relationships but also to encode social actions, such as promising, warning, or persuading. Across the corpus, adults use if-clauses pragmatically to encourage compliance, reinforce mealtime discipline, and shape children's moral orientation toward eating, presenting food intake as a behaviour worthy of praise, reward, or concern. Specifically, the presence of both positive and negative conditional statements highlights a dual approach to regulating eating behaviours. On the one hand, adults incentivize eating by linking it to rewards, such as receiving a treat or being allowed to engage in a preferred activity. This aligns with previous findings on the use of food as a bargaining tool in parental feeding strategies (Blissett et al., 2010; Russell, Worsley, & Campbell, 2018). On the other hand, eating is sometimes framed in terms of negative consequences, such as potential illness or discomfort. While these messages may serve as cautionary guidance, they could also contribute to unnecessary anxiety around food. What emerges clearly, however, is that these constructions serve to secure compliance while simultaneously promoting a moral orientation toward food, framing eating as an act embedded with values and social meanings.

Taken together, these interactional patterns highlight how adults not only regulate consumption through explicit

commands and conditional incentives, but also shape children's emotional and moral relationships with food, positioning themselves as the central arbiters of eating behaviour within the family.

Beyond eating itself, adult speech also enforces expectations regarding mealtime behaviour. The frequent use of phrases such as *eat properly* and *eat nicely* highlights the socializing function of food discourse, instilling norms of politeness, table manners, and appropriate mealtime conduct. Unlike portion-related directives, these phrases were not framed conditionally, suggesting that they function as direct expectations of behaviour, reinforcing norms about politeness and table manners without offering a reward or consequence.

Adults' regulatory function coexists with a more relational mode of communication, in which affective language serves to temper authority. Indeed, in many of the analyzed interactions, terms of endearment such as *darling* or *sweetheart*, frequently accompany directives. While they convey warmth, they also serve important relational and pragmatic functions: reinforcing social bonds and offsetting the impact of face-threatening acts in intimate settings through mitigation (Fraser, 1980; Caffi, 1999). In the context of food discourse, such affective language operates at the intersection of care and control, simultaneously expressing warmth and subtly enforcing behavioural expectations. Closely related to these affective strategies is the use of praise, particularly in gendered forms such as *good boy* and *good girl*. Indeed, such motivational phrases appear unequally distributed, with boys receiving more frequent verbal reinforcement for eating. This disparity likely reflects broader cultural expectations in which boys are encouraged to eat heartily, while girls may receive less overt praise for consuming food. Such implicit messaging aligns with research on gendered feeding practices, which shows that boys are often socialized to eat more and are less subject to restrictive practices than girls (Harris, Mallan, Nambiar, & Daniels, 2014). Over time, these patterns may shape differing attitudes toward eating and food consumption across genders.

## 5. Conclusions

This study highlighted notable differences in how adults and children engage in food-related discourse within British families. While both groups frequently mention staple foods, children's conversations placed greater emphasis on sweet foods, often in the context of desire and request-making. Adults, by contrast, introduced a wider range of food-related terms and consistently took the lead in food discussions, showing their role in shaping children's dietary knowledge, social norms, and eating habits.

Taken together, these findings underscore the broader social, relational, and behavioural implications of food discourse. Adults not only control what food is made available but also shape children's perceptions of eating through language. Their discourse frames food as both a practical and moral activity, structured by expectations about portion sizes, mealtime conduct, and the moral value attached to eating practices. The frequent use of imperative and conditional constructions serves to guide, persuade, and discipline, contributing to children's internalization of food-related norms. Yet, this authority is not exercised in isolation. Affective strategies such as terms of endearment and praise also play a central role, helping to balance control with care and relational warmth. These dual functions, i.e. regulatory and relational, demonstrate how food talk operates at the intersection of discipline, affection, and identity formation.

This preliminary investigation into the CHILDES dataset offers a unique, ecologically valid perspective on food discourse by analysing spontaneous, naturalistic conversations across diverse family contexts. In doing so, it reinforces insights from previous research while expanding our understanding of how language actively participates in food socialization. Future studies could build on these findings by examining cross-cultural or developmental shifts in food discourse, exploring how moral and emotional dimensions of eating are constructed linguistically, and investigating the implications of gendered and affective language in mealtime interactions.

Ultimately, a deeper understanding of how adults communicate about food can provide valuable insights into the ways language shapes children's attitudes toward eating, influencing their dietary habits, food preferences, and relationship with food well into adulthood, while also contributing to their long-term wellbeing and overall health. By recognizing the role of discourse in food socialization, future research and interventions can support healthier eating behaviours and foster more positive, mindful approaches to food from an early age.

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## Notes

Note 1. CHAT (Codes for the Human Analysis of Transcripts) is a standardized transcription system used to structure conversational data. It employs a set of codes and tags to annotate utterances, identify speakers, and capture other relevant linguistic and contextual features.

Note 2. [pylangacq.org](http://pylangacq.org)

Note 3. [nltk.org](http://nltk.org)

Note 4. [spacy.io](http://spacy.io)

Note 5. [pandas.pydata.org](http://pandas.pydata.org)

Note 6. The number of adult speakers was impossible to estimate since most of them are identified through labels (e.g., MOT for mother, FAT for father, etc.) rather than their proper nouns, unlike children whose proper names are usually stated.

Note 7. NLTK was chosen for concordance display to allow for the extension of right and left contexts to as many words as needed.

Note 8. [foodstandards.gov.au/science-data/monitoringnutrients/afcd](http://foodstandards.gov.au/science-data/monitoringnutrients/afcd)

Note 9. [en.wikipedia.org/wiki/Lists\\_of\\_foods](http://en.wikipedia.org/wiki/Lists_of_foods)

Note 10. [crummy.com/software/BeautifulSoup/](http://crummy.com/software/BeautifulSoup/)

Note 11. Chi-square test was used for words with sufficiently large sample sizes, ensuring that expected counts in each category were high enough to provide reliable results. Fisher's exact test was applied to words with lower frequencies, as it is more accurate than the Chi-square test when dealing with small sample sizes.

Note 12. The asterisk stands for any word.

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