



Article

Children Whose Parents Spend More Time Preparing Dinner Eat More Made-from-Scratch Meals

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Abstract: The aim of this paper is to investigate associations between the time spent by parents preparing dinner and children's consumption of made-from-scratch meals. We developed a cross-sectional study with 595 parent–child dyads from São Paulo, Brazil. Data were collected via telephone interviews: time spent preparing dinner and socio-demographic characteristics were obtained using a questionnaire, while food consumption was recorded via dietary recall. Crude and adjusted regression analyses were used to test associations between time spent preparing dinner and the contribution of made-from-scratch meals to children's dinner energy intake. Parents (93.1% woman, 60.5% aged 31–41, 62.2% white, 88.4% married, 71.2% employed, 50.0% ≥ 12 years of education) spent an average of 108- and 112-min preparing dinner on weekdays and weekends, respectively. Spending more than two hours/day was positively associated with the consumption of made-from-scratch meals ($\beta = 4.4$; $p = 0.035$). When parents spend more time preparing dinner, their children consume more made-from-scratch meals. Given that cooking from scratch is considered healthier but takes more time, it is important that policies and interventions aimed at promoting healthier meals among children/families and avoiding overburdening women with domestic tasks are accompanied by recommendations that focus on promoting an equitable division of food work among families.

Keywords: time-use; home cooking; food preparation; food consumption; children



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1. Introduction

Worldwide, home cooking seems to be undergoing some changes [1,2]. According to a global analysis of cooking practices undertaken by Gallup and Cookpad across over 140 countries, people cooked an average of 6.4 meals per week in 2022. This represents a slight drop of 0.3 meals from the average of 6.7 meals in 2020–2021, but it is similar to the 2018 pre-pandemic rates when the average was 6.5 meals per week. In Latin America and the Caribbean region, cooking trends also experienced a slight decline in 2022. However, the region remains among those with the highest frequency of home cooking per week in the world [2].

Time availability is one of the key determinants of home cooking [3]. The increase in time spent in preparing meals at home—which includes everything from purchasing ingredients to cleaning up after eating [4,5]—is associated with indicators of improved diet quality [3], such as more frequent consumption of vegetables, salads, fruit, and fruit juices. In the United States, a study centred on families of Supplemental Nutrition Assistance

Program (SNAP) recipients found that increased time availability was associated with an increased percentage of home-cooked meals, increased fruit and vegetable consumption, and decreased sodium consumption among SNAP recipients [6].

On the contrary, spending less than one hour per day on food preparation was associated with more frequent use of fast food restaurants, greater use of packaged and convenience foods, such as frozen pizzas [5,7], and lower intakes of vegetables [8].

Time proved to be the most frequently cited barrier to meal preparation among a group of Canadian parents, regardless of their employment status [9]. In the Australian context, a nationwide study unearthed concerning patterns in dietary behaviour from 1989 to 2010 associated with the amount of time available to prepare food at home. The results suggest a shift from home cooking to the use of pre-prepared and ultra-processed foods (UPF), as well as a reduction in the amount of time spent preparing and cooking food across the country. The shift discussed by the authors affects not only food choices, but also presents additional challenges such as insufficient control over ingredients and preparation methods. This, in turn, could lead to an increased prevalence of unhealthier options in larger contexts and a consequent decline in overall dietary quality. As a result, fast-paced lifestyles, coupled with this shift, could give rise to diet-related diseases and obesity [10].

A survey conducted with over 27,000 consumers aged 15 and above in 22 countries has shown that the worldwide average number of hours spent cooking per week by consumers, excluding those who do not cook, is 6.4 h [11]. It has been observed that the time families spend preparing meals at home has decreased over the years. The increased participation of women in the labour market is still seen as one of the factors influencing this decline, since even with the increased participation of men in domestic tasks, women are still primarily responsible for these activities, including meal preparation [12,13]. Furthermore, cultural disparities, including those among individuals within the same nation but with distinct ancestral or social backgrounds, as well as differences in age and socioeconomic status, seem to impact the amount of time allocated to meal preparation [14].

Time management is a crucial factor in cooking, particularly when preparing meals from scratch. This is because such meals involve using raw/unprocessed or minimally processed foods, including natural seasonings and culinary ingredients [15], which require time to prepare and cook before consumption. The management of cooking time is therefore seen as a barrier to the adoption of healthier eating habits by the population [15–19].

While many food-based dietary guidelines worldwide fail to underscore the importance of managing cooking time for food preparation at home in their key messages [18], the Brazilian Dietary Guidelines [15,16] recommend setting aside the necessary time for cooking, recognising its inherent value. They also emphasise the importance of improving culinary skills as a strategy to make the preparation of meals based on unprocessed or minimally processed foods less time-consuming. A recent study conducted in Canada provides evidence in favour of these principles, indicating that food preparation during adolescence is a strong predictor of adult food skills. Furthermore, the study demonstrates that increased time spent on meal preparation during weekends is positively correlated with improved food skills in the population under study [20].

Despite its importance, studies that indicate whether the time spent preparing meals at home influences the quality of meals consumed by Brazilian families are still in their incipient stages. The present study aims to investigate whether there is a relationship between the time spent by parents preparing meals at home and the consumption of meals prepared from scratch by their children in a sample of Brazilian parent–child dyads.

2. Materials and Methods

We analysed the baseline—cross-sectional data—from a community-based randomised controlled trial designed to investigate the influence of adults' home cooking on school-aged children's dietary intake. Details of the study methodology have been published previously [21–24].

Briefly, this study was developed with parent–child dyads from one of the largest private school chains in the state of São Paulo, Brazil. It included all the full-time schools of the chain ($n = 9$) located in the São Paulo metropolitan area. From Monday to Friday (8 a.m. to 5 p.m.), school-age children (6 to 9 years old) were provided with three meals per day (morning snack, lunch, and afternoon snack). In the Brazilian context, breakfast, lunch, and dinner are the three primary daily meals. The latter two meals are typically deemed ‘hot meals’ incorporating traditional Brazilian dishes such as rice and beans, meat, and salad [15,25,26]. Only dinner was analysed in this study because on most days of the week, this was the only main meal the children ate at home.

All children in Years 1 to 4 (i.e., between the ages of six and nine) who attend the nine specified schools, and the primary caregivers responsible for their meals (i.e., their parents or other adults), were eligible for the study. The parent–child dyads’ sample was obtained via random cluster sampling in two selection stages. The first phase involved selecting the schools, and the second phase involved selecting the classes that were invited to take part in the study. Out of the total 1130 potential adults who were invited to participate in this study, 755 agreed to do so, resulting in a 33.2% refusal rate during recruitment. Of these, 660 completed the two telephone interviews for data collection (12.6% loss rate). The survey did not include adults who were paid to look after or feed the children, such as nannies or domestic workers. Additionally, when siblings attended the same school, which occurred in 1.1% of cases, only one of them was included in the study. One child was excluded from the study because his parents were hearing impaired, which made it impossible to collect data via telephone interview [21–23].

The data were collected in 2015 by trained interviewers. They used a computer-assisted telephone interviewing (CATI) instrument developed and previously tested in a pilot study to investigate home cooking in the Brazilian reality [21–24]. The first interview collected data on socio-demographic characteristics, while the second interview collected data on the time spent by parents preparing dinner. Data on children’s food consumption were collected in both interviews. Before considering a participant as lost, a minimum of five telephone contact attempts ($n = 5$) were made.

The time spent preparing dinner at home was measured by two open-ended questions: (1) ‘During the week, from Monday to Friday, how much time do you spend each day preparing dinner at home? Including pre-preparation, cooking and cleaning up after the meal’; and (2) ‘At weekends, i.e., Saturday and Sunday, how much time do you spend each day preparing dinner at home? Including preparation, cooking, and cleaning up after the meal’. Information on the time spent preparing dinner was collected in minutes.

Children’s food consumption was collected via two food recalls applied on non-consecutive days—one for weekdays and one for weekend days—in which parents reported their children’s intake at dinner the previous day [21–23]. Food consumption was classified according to the NOVA classification system [17]. In this study, we only analysed the consumption of made-from-scratch meals, that is, those prepared with foods from NOVA’s Group 1—unprocessed or minimally processed foods (e.g., rice, beans, meat, fruit, vegetables, and water, among others)—combined with Group 2—processed culinary ingredients (e.g., oils and fats, sugar, honey, molasses, and salt, among others)—commonly used to season group 1’s foods when cooking culinary preparations. Children’s consumption of NOVA’s Group 3—Processed foods (e.g., canned vegetables, cereals, pulses or fish, with added salt, oil or sugar, salted and smoked meats, etc.) and Group 4—Ultra-processed foods (e.g., pre-prepared pies and pizzas, nuggets, sausages, hamburgers, instant noodles, packaged sandwich bread, ready-made sauces, instant desserts, and soda, among others) were not included in our analysis.

The sociodemographic variables included were sex (male; female), age (years, categorical: 22–30, 31–41; ≥ 42 years old), race/colour (white: yes/no), marital status (married/cohabiting: yes/no), education (up to 8 years; 9–11 years; 12 or more years of education); employment status (employed: yes/no); and family characteristics: number of

persons (2–3 persons; 4 persons; 5 persons or more) and children in the household (1 child; 2 children; 3 children or more).

The analyses included data from the 595 parent–child dyads with complete information for the main variables of interest: ‘time spent preparing dinner at home’ and ‘children’s food consumption’. Time spent preparing dinner at home during weekdays and weekends was reported as mean with respective 95% confidence intervals and frequency categories: up to 1 h/day; >1 to 2 h/day; >2 h/day. The core indicator used to describe the extent of consumption of meals prepared from scratch was the mean relative (%) energy contribution of NOVA food group 1 combined with group 2 to children’s total energy intake at dinner. Estimates of children’s average food intake were based on the consumption reported for the two days on which the food recalls were applied (a weekday and a weekend day); the recalls related to weekdays were multiplied by five and those related to weekend days by two, and the sum of the two results was divided by seven [22,27].

Sociodemographic variables (sex, age, race/colour, marital status, education and employment status of parents, and number of people and children in the household) were used to describe the sample. The marginal mean of energy intake for each subgroup of unprocessed or minimally processed foods and their culinary preparations was estimated and its increase across time-spent categories was tested using the p-trend. Linear regression analyses—both crude and adjusted for adult sex, age, race/colour, marital status, education and employment status, number of persons and children in the household, and day of the week—were used to analyse the relationship between the time spent preparing dinner (explanatory, categorical variable) and the contribution of meals prepared from scratch to children’s food consumption at dinner (outcome, continuous variable). All statistical analyses were performed using the Stata survey module (version 14.2) (Stata Corp., College Station, TX, USA), with a significance level of $p < 0.05$.

3. Results

Parents ($n = 595$) were predominantly female (93.1%), aged between 31 and 41 years (60.5%), white (62.2%), married (88.4%), formally employed (71.2%), and with a level of education equivalent to 12 years or more (50%). Most households consisted of four people (49.2%) and had only one child (63.4%) (Table 1). This sample of adults spent on average 108.3 min/day (95% CI 104.9; 111.6) preparing dinner on weekdays and 112.1 min/day (95% CI 108.0; 116.1) preparing dinner on weekend days.

Table 1. Average daily time spent preparing dinner at home by socio-demographic characteristics. Parents of children living in the Greater São Paulo Area, SP, Brazil, 2015. ($n = 595$).

| Variables | Distribution | | Daily Time Spent Preparing Dinner at Home | |
|--|--------------|------|---|--------------|
| | n^1 | % | Mean | 95% CI |
| Sex of parents | | | | |
| Male | 41 | 6.9 | 108.1 | 99.3; 116.9 |
| Female | 554 | 93.1 | 110.3 | 107.6; 113.0 |
| Age of parents | | | | |
| 22–30 | 58 | 9.8 | 113.0 | 103.2; 122.9 |
| 31–41 | 358 | 60.5 | 109.8 | 106.6; 113.1 |
| 42–82 | 176 | 29.7 | 109.0 | 104.3; 113.8 |
| Race/colour of parents—White | | | | |
| No | 224 | 37.8 | 110.8 | 106.3; 115.3 |
| Yes | 368 | 62.2 | 109.4 | 106.3; 112.6 |
| Marital status of parents—Married/cohabiting | | | | |
| No | 69 | 11.6 | 102.9 | 94.7; 111.0 |
| Yes | 525 | 88.4 | 110.9 | 108.1; 113.6 |

Table 1. Cont.

| Variables | Distribution | | Daily Time Spent Preparing Dinner at Home | |
|---------------------------------------|-----------------------|------|---|--------------|
| | <i>n</i> ¹ | % | Mean | 95% CI |
| Educational level of parents | | | | |
| Up to 8 years of education | 24 | 4.0 | 96.0 | 85.9; 106.1 |
| 9 to 11 years of education | 273 | 46.0 | 108.9 | 105.0; 112.8 |
| 12 years or more of education | 297 | 50.0 | 112.0 | 108.3; 115.7 |
| Employment status of parents—Employed | | | | |
| No | 171 | 28.8 | 110.4 | 105.3; 115.5 |
| Yes | 422 | 71.2 | 109.8 | 106.8; 112.9 |
| Number of people in the household | | | | |
| 2 to 3 people | 174 | 29.7 | 110.4 | 105.3; 115.5 |
| 4 people | 288 | 49.2 | 108.1 | 104.4; 111.8 |
| 5 people or more | 123 | 21.2 | 111.9 | 106.7; 117.1 |
| Number of children in the household | | | | |
| 1 child | 374 | 63.4 | 110.0 | 106.6; 113.3 |
| 2 children or more | 183 | 31.0 | 108.7 | 104.1; 113.6 |
| 3 children or more | 33 | 5.6 | 114.2 | 104.3; 124.0 |

¹ For some variables, the total number of observations is not 595 due to missing values.

When analysing the time spent preparing dinner in categories, we found that 24.2% of these adults spent up to one hour per day; 54.1% spent more than one to two hours per day; and 21.7% of them spent more than two hours per day preparing dinner at home.

The average energy intake of children during dinner was 669.7 kcal. Out of this total, 65.6% was derived from unprocessed or minimally processed foods combined with culinary ingredients—this percentage represents the consumption of meals made from scratch; 3.2% from processed foods; and 31.2% from ultra-processed foods.

When analysing all subgroups of foods used to prepare homemade meals from scratch, the primary calorie sources for children's evening meals were identified as rice, beef, pork, beans, and poultry (Table 2). Children whose parents spent more than two hours per day preparing dinner had a statistically significant higher consumption of fish, soups, vegetables, and other mixed dishes (*p*-trend < 0.05).

Table 2. Average energy intake of unprocessed or minimally processed foods and their culinary preparations during dinner by children (*n* = 595), according to time spent by parents preparing dinner at home. Greater São Paulo Area, SP, 2015.

| Unprocessed and/or Minimally Processed Foods and Their Culinary Preparations ¹ | Time Spent by Parents Preparing Dinner at Home | | | | | |
|---|--|-------------|---------------------------------|------------|----------------------------|------------|
| | Up to 1 h/day (<i>n</i> = 103) | | >1 to 2 h/day (<i>n</i> = 321) | | >2 h/day (<i>n</i> = 171) | |
| | kcal at Dinner | | | | | |
| | Mean | 95% CI | Mean | 95% CI | Mean | 95% CI |
| Rice | 88.5 | 76.3; 100.8 | 82.5 | 77.9; 87.2 | 86.6 | 77.1; 96.1 |
| Beans | 58.6 | 44.6; 72.5 | 57.9 | 52.9; 62.8 | 52.7 | 43.5; 61.9 |
| Other legumes | 0.7 | −0.5; 1.9 | 1.0 | 0.3; 1.7 | 0.3 | −0.7; 1.2 |
| Beef or pork | 58.8 | 42.8; 74.9 | 66.9 | 59.5; 74.4 | 66.2 | 52.4; 80.0 |
| Poultry | 55.6 | 36.6; 74.7 | 43.4 | 35.9; 51.0 | 61.9 | 43.2; 80.7 |
| Fish * | 0.4 | −2.6; 3.5 | 2.0 | 0.3; 3.7 | 6.6 | 4.3; 9.0 |
| Eggs | 5.5 | 2.5; 8.5 | 6.1 | 4.4; 7.8 | 6.9 | 4.5; 9.1 |
| Fresh fruit juice | 18.0 | 9.6; 26.5 | 28.1 | 24.3; 32.1 | 26.7 | 19.7; 33.8 |
| Fruits | 15.0 | 9.2; 20.9 | 21.1 | 18.0; 24.2 | 21.3 | 14.7; 27.9 |
| Homemade snacks | 26.6 | 9.3; 43.9 | 19.1 | 13.6; 24.6 | 24.1 | 13.5; 34.6 |
| Cakes | 15.6 | 5.6; 25.5 | 12.3 | 8.7; 15.8 | 15.0 | 7.7; 22.2 |
| Soups * | 5.9 | −0.7; 12.6 | 11.9 | 8.1; 15.6 | 15.5 | 10.3; 20.7 |

Table 2. Cont.

| Unprocessed and/or Minimally Processed Foods and Their Culinary Preparations ¹ | Time Spent by Parents Preparing Dinner at Home | | | | | |
|---|--|------------|-------------------------|------------|--------------------|------------|
| | Up to 1 h/day (n = 103) | | >1 to 2 h/day (n = 321) | | >2 h/day (n = 171) | |
| | kcal at Dinner | | | | | |
| | Mean | 95% CI | Mean | 95% CI | Mean | 95% CI |
| Vegetables * | 11.0 | 7.4; 14.7 | 12.9 | 11.3; 14.4 | 14.6 | 11.3; 17.9 |
| Potatoes | 17.8 | 7.7; 27.9 | 14.1 | 10.8; 17.3 | 13.9 | 7.8; 20.0 |
| Manioc | 4.3 | 1.2; 7.5 | 4.2 | 2.4; 6.0 | 4.6 | 2.2; 7.0 |
| Corn and corn-dishes | 4.2 | 1.9; 6.5 | 3.3 | 2.0; 4.6 | 2.6 | 0.8; 4.4 |
| Other tubers | 1.1 | 0.6; 1.6 | 0.2 | −0.05; 0.5 | 0.3 | −0.06; 0.7 |
| Spaghetthi | 8.4 | 2.4; 14.5 | 9.7 | 6.2; 13.1 | 10.7 | 6.0; 15.4 |
| Other pastas | 4.5 | 1.2; 7.9 | 5.8 | 3.9; 7.7 | 2.1 | −0.5; 4.7 |
| Milk and natural yogurt | 8.0 | 2.4; 13.6 | 14.0 | 10.8; 17.2 | 13.0 | 8.7; 17.4 |
| Other mixed dishes * | 3.5 | −3.4; 10.4 | 9.3 | 5.4; 13.2 | 9.9 | 4.6; 15.3 |

¹ Data on food intake from dietary recalls. * $p < 0.05$ for linear trend across categories of time spent cooking by parents.

Table 3 presents the time parents spent preparing dinner at home (in categories) and its effect on children's consumption of made-from-scratch meals for dinner. The increase in time spent preparing dinner was positively associated with the consumption of made-from-scratch meals (crude $\beta = 4.8$; $p = 0.019$; adjusted $\beta = 4.4$; $p = 0.035$).

Table 3. Crude and adjusted association between the average percentage of made-from-scratch meals in children's dinners, according to the amount of time parents spent preparing dinner at home. São Paulo, Brazil, 2015. ($n = 583$).

| Time Spent Preparing Dinner at Home | Percentage (%) of Meals Made from Scratch Consumed at Dinner | Coef. Crude | p | Coef. Adjusted ^a | p |
|-------------------------------------|--|-------------|-------|-----------------------------|-------|
| Up to 1 h/day | 63.9 | Ref | | Ref | |
| >1 to 2 h/day | 66.2 | 2.3 | 0.177 | 1.6 | 0.345 |
| >2 h/day | 68.7 | 4.8 * | 0.019 | 4.4 * | 0.035 |

^a Analysis of regression adjusted for adult's sex, age, race/colour, marital status, education, and employment status; number of people and of children in the household; and day of the week. * $p < 0.05$ for linear trend across categories of time dedicated to cooking dinner at home.

4. Discussion

This study investigated the time spent preparing dinner at home and found that, in this sample of Brazilian parent-child dyads, the higher the amount of time parents spent preparing dinner (>2 h/day), the greater the consumption of made-from-scratch meals by their children.

Time plays a crucial part in encouraging healthier dietary practices [5]. Greater availability of time is considered one of the most important factors determining home-food preparation [3]. Conversely, time constraints may hinder the use of raw ingredients when cooking [28]. Furthermore, research indicates that increased time spent preparing meals at home is linked to better dietary quality, including a more frequent consumption of vegetables, salads, fruit, and fruit juices [5]. Thus, our findings align with the Brazilian Dietary Guidelines [15,16], which emphasise the importance of dedicating time to food preparation as a critical element in promoting healthy eating habits.

In the Brazilian context, foods that are typically used to cook from scratch—that is, unprocessed or minimally processed foods—are still affordable [29]. In addition, practical and cultural factors lead to a strong appreciation of traditional/homemade meals. As a result, Brazilians primarily consume unprocessed or minimally processed foods and culinary preparations made from these ingredients [30,31]. Our study found that the children mainly consumed foods that are part of the traditional Brazilian diet, such as rice,

beans, meat, fruits, and vegetables. Additionally, when parents spent more than two hours per day preparing dinner, their children consumed significantly more fish, vegetables, soups, and mixed dishes, compared to those whose parents spent less time. According to the Brazilian Food Guide [15], it is highly recommended to consume fish and vegetables, including vegetable-based culinary preparations such as soups, as they are considered important alternatives to reduce the consumption of red meat. This is particularly relevant as red meat consumption is high among the Brazilian population.

The Brazilian Dietary Guidelines [15,16] recommend eating beans during the main meals, including dinner, as part of a balanced and nutritious diet. Our sample did not show any difference in the percentage of consumption based on the time parents spent preparing dinner, despite the time-consuming preparation of beans. To reduce preparation time, it is a common practice among Brazilian families to soak them in water for a few hours before cooking. Additionally, a pressure cooker is used, and they cook them in larger quantities for storage and later use. Economic, practical, and cultural factors, as well as relevant characteristics of our participant group (strongly associated with home cooking practices, namely being a woman and being the primary caregiver for children) [3] could account for our results.

Despite this, only 21.7% of parents in our study spent more than two hours a day preparing dinner at home. The decrease in meal preparation time is not unique to our study. Across North America, people are cooking less frequently and spending less time cooking [7]. However, compared to other populations, our sample still dedicates more time for cooking daily than usually found worldwide. A cross-sectional analysis conducted with 4214 UK participants revealed that the median time spent cooking over 24 h was 50 min in women and 10 min in men [32]. In France, a cross-sectional analysis conducted with 62,373 adults participating in the web-based NutriNet-Santé cohort study found that time for meal preparation (min/day) also differ between women and men; women used to cook 42 min/day, while for men, 27.9 min/day [33]. In the United States, a survey carried out with 1036 midlife women has shown that about half of the respondents spent less than five minutes preparing breakfast and lunch while spending less than 20 min preparing dinner [8]. In Brazil, according to a survey conducted with over 27,000 consumers aged 15 and above in 22 countries, consumers who participated in the survey ($n = 1502$) reported an average cooking time of 5.2 h per week among those who cook [11]. Given that the average cooking time in the country is 5.2 h per week, it appears that the parents in our study who spent more than 2 h per day preparing dinner may be an exception.

Gender issues are critical when it comes to cooking. Almost 100% of our sample consisted of women who identified themselves as the primary food provider for their families. Women around the world tend to cook more frequently than men [34], with more time spent preparing meals at home: while men cooked 5.0 h/week, women cooked 7.6 h/week. In Brazil, women spent 5.8 h per week cooking, while men spent 4.4 h per week [11]. For instance, mothers who stayed at home devoted more time cooking compared to those who worked either full-time or part-time [12,35]. Consequently, as women devote more time to food-related household tasks, they have less time for self-care, leisure activities, and socialising [4]. Female overload is more pronounced depending on social class and race. Domestic activities involve less collaboration for poor and black women compared to their upper-class and white counterparts [36].

Even though people can change their time availability [3], the complexity of preparing meals at home means that simply providing information about the importance of spending more time cooking to achieve a healthy diet may not be enough to change their behaviour. Therefore, encouraging equal sharing of domestic work should involve more than just individual time management. In addition to individual efforts to address the challenges posed by time scarcity, the role of governments in promoting and enabling the healthy use of time is essential. This includes the implementation of public policies that address societal issues and promote a fair distribution of household responsibilities to encourage work sharing in the private domain, especially for those in greater social vulnerability [15,16,36,37].

It is worth noting that in the Brazilian context, culinary practices became more important in public policies on food and nutrition, with the publication of the Reference Framework of Food and Nutrition Education for Public Policies [38], which points to cooking as a tool to promote healthy eating. The second edition of the Dietary Guidelines for the Brazilian Population deepened this approach, highlighting the main challenges and strategies for home cooking, such as the development of culinary skills, the need for an equitable division of household tasks among family members, and better time management for preparing meals [15]. The Food Guide for Brazilian Children Under Two Years of Age, published in 2019 [16], resumes the concepts presented in previous documents, highlighting the time devoted to preparing meals as a crucial factor for an adequate and healthy diet for children under two years of age and their families.

Finally, in addition to the time it takes to prepare food at home, it is important to consider the financial accessibility of dining-out alternatives if families decide not to prepare meals at home. In Brazil, economic factors such as the rising cost of meals in commercial establishments may lead to the perception that cooking at home is a more economically viable option. Inflation and fluctuations in food prices can directly impact families' purchasing power. Therefore, a significant proportion of the population cannot afford to eat out and must instead cook at home. Positive income elasticity suggests that families with higher incomes are more likely to eat out [30,39]. Future studies should consider the correlation between cost and time.

This study provides new evidence on this topic, suggesting that spending more time preparing meals at home could be an important strategy to promote the consumption of made-from-scratch meals among children. Given that cooking from scratch is considered healthier [29,40] but takes more time, it is essential that policies and interventions aimed at promoting healthier meals among children/families and avoiding overburdening women with domestic tasks are accompanied by recommendations that focus on promoting an equitable division of food work among families.

Despite its contribution to the literature, some limitations should be considered when interpreting our findings. This is a cross-sectional study, which does not allow causality to be established. The results refer to a specific population and are therefore not representative of the Brazilian population and cannot be generalised to a large extent. Nevertheless, there is no apparent reason to expect that the direction of the association between the time spent by parents preparing dinner and the consumption of made-from-scratch meals found in our study would be different if tested in populations with characteristics like the sample of this research. Finally, the use of dinner as the only meal to assess a child's food consumption can be considered as another limitation. Although dinner was the main meal that children ate at home for most of the week, we cannot extrapolate the consumption observed at dinner to all of their meals.

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Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy restrictions, but the materials of this study can be accessed at: <http://www.teses.usp.br/teses/disponiveis/6/6138/tde-04092017-152620/pt-br.php>. Accessed on 1 January 2024.

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