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Parenthood as a Window of Opportunity for Dietary Changes: Perspectives From Uruguayan Parents

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Abstract

Research on behavioral and social science has demonstrated that transitions throughout a person's life course, as the life event of becoming a parent, represent an opportunity for dietary changes. However, research in this area has been mostly restricted to developed European and North American countries and has shown ambiguous results. The present work aimed to gain an in-depth understanding on the changes in eating habits caused by the transition to parenthood and to explore factors influencing those changes in Uruguay, a Latin American country. Forty-two in-depth interviews with Uruguayan parents from diverse social-economic backgrounds were conducted. The narrations by the interviewees evidenced mostly positive changes during three stages in the transition: pregnancy, the first months with the baby, and the beginning of complementary feeding. Most informants perceived changes mainly in terms of increased consumption of fruits, vegetables, and pulses; increased consumption of homemade meals; and decreased consumption of ultra-processed foods, fast foods, and fried foods. Reasons for these changes included adaptation of meals to the child's needs and schedule, feeling of responsibility for the child's health, and willingness to be a good role model. Factors influencing changes in eating habits were identified in some levels of the socioecological model and included socioeconomic status; price of fruits, vegetables, and fish; low accessibility of good quality fish; perceived time pressure; father's low interest on healthy eating; social support; and access to nutrition information. Findings suggest that parenthood represents a window of opportunity for favorable changes in eating habits. However, barriers constraining those changes should be addressed by stakeholders.

Keywords

parents, Uruguay, life course, eating habits, qualitative methodology, socioecological approach

Several of the major challenges facing humankind are related to food consumption. A growing body of evidence supports the role of unhealthy diets on the incidence of obesity and noncommunicable diseases and environmental degradation (Willett et al., 2019), pointing to the need for public policies and strategies that promote healthy eating patterns (World Health Organization, 2016). A large proportion of our eating behaviors can be regarded as habits, that is, learned sequences of events that are automatically performed in stable and repetitive circumstances (van't Riet et al., 2011). Considering that eating habits are difficult to change, the identification of contextual factors that trigger positive changes can provide relevant insights for policymaking. Looking for situations where individuals adopt dramatic changes in their eating habits, life course events stand out as they disrupt daily routine (Schäfer et al., 2012).

The study of meaningful life stage transitions affecting food habits and choices is called a *life course perspective*. This approach provides a framework to understand how the life history of individuals or groups may account for differences in health (Devine, 2005). An example of meaningful transition is the life event of becoming a parent (Wethington, 2005). Having children might shape how adults manage food and eating and can encourage the adoption of recommended nutrition practices (Hartmann et al., 2014). However, life events are no guarantee that positive behavioral changes will occur, as socioeconomic and environmental factors are key moderators of such changes (Schäfer & Bamberg, 2008).

Research on changes in eating habits when becoming parent in Europe and North America has shown ambiguous results. There is some evidence that parenthood triggers

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positive changes in dietary habits by increasing motivation for healthy eating and by encouraging more structured meal routines (Bassett-Gunter et al., 2013; Roos et al., 1998; Smith et al., 2017). However, having children might also impose challenges on individuals' eating patterns, contributing to a downturn on healthy eating (Elstgeest et al., 2012; Moura & Aschemann-Witzel, 2020). For example, first-time and second-time Canadian mothers consumed higher energy, fat, and sugar compared with women without children (Nasuti et al., 2014). These findings are congruent with those found among parents from the United States, indicating that the presence of children in the household was associated with higher total fat and saturated fat intake. Adults with children ate high-fat foods more often than adults without children, including salty snacks, pizza, ice cream, cookies, and processed meats (Laroche et al., 2007). The same results were observed among Swedish women, who reported eating more discretionary food and decreasing the intake of fruit and vegetable after becoming mothers (Wennberg et al., 2016).

Extending the current knowledge to other cultures and to more diverse socioeconomic groups can give a thorough picture of the phenomenon of early parenthood on individuals' eating habits. There is a consensus that the accuracy of research results can be maximized by considering cross-cultural samples (Ember, 2009; Takeda & Melby, 2017). This seems to be particularly the case of food and nutrition investigations, owing to the significant variations in healthy eating behaviors and attitudes toward food across different cultural groups (Orji & Mandryk, 2014; Rodríguez-Arauz et al., 2016).

The identification of facilitators for positive changes in eating habits within the family realm is crucial for the development of public policies and nutrition interventions targeting individuals and communities (Jackson et al., 2017). In particular, understanding the lifestyle factors associated with parenthood (as experienced and expressed by parents themselves) could assist health professionals in creating home environments that support healthy weights for the whole family since early on (Martin-Biggers et al., 2018). This knowledge is also important considering that parental eating habits provide role modeling (Brown & Ogden, 2004) and might shape their children's eating patterns (Birch & Ventura, 2009).

In this context, the present work responds to a call for further investigation on the changes in eating habits in the transition to parenthood from a broader international perspective, including individuals from diverse socioeconomic backgrounds in a developing Latin American country (Reczek et al., 2014; Versele et al., 2021). The purpose of the article was to explore how parents perceive the impact of early parenthood on their eating habits and to explore factors influencing those changes from a life course perspective. The study was conducted in Uruguay, an emerging high-income country located in the southeastern part of South America. Uruguay is one of the Latin American countries with the highest rates of overweight and obesity in all age groups: 64.9% among adults, 40% among school-aged children, and 9.8% among infants (0–23 months; Administración Nacional de Educación Pública, 2020; Carrero et al., 2020; Ministerio de Salud Pública, 2015).

Method

Study Design

Qualitative measures are essential for improving the understanding of the impact of life stage transitions on eating habits, allowing to uncover the reasons why individuals do or do not adopt healthy dietary patterns (Falk et al., 2001). In the present work, in-depth interviews were deemed to be the best approach as they allow a comprehensive examination of a phenomena (early parenthood) not previously studied in the targeted group (Flick, 2018). This methodological approach has been previously applied, for example, to investigate changes in eating behaviors during the transition to parenthood (Aschemann-Witzel, 2013; Edvardsson et al., 2011; Moura & Aschemann-Witzel, 2020), new mothers' reasons for having substantial postpartum weight retention (Christenson et al., 2016), and low socioeconomic status (SES) families' practices and reflections on food and health (Johansson et al., 2013).

Sample

The study was part of a larger project on parental feeding practices among parents of children aged 6 months to 5 years living in Montevideo (Uruguay). This age range was specified taking into account that the period from when the child starts eating solid foods until the preschool age has been identified as important for changes in eating behaviors among mothers (Aschemann-Witzel, 2013; Moura & Aschemann-Witzel, 2020). Moreover, given that SES is one of the factors that largely influence food choice and infant feeding practices (Fernández-Alvira et al., 2015), recruitment purposefully aimed at including a diverse sample in terms of SES. For these reasons, participants' recruitment was based on two variables, each with two levels: child age (6–23 months, 2–5 years old) and type of educational institution (public, private). Four groups of participants were recruited through eight educational institutions and day care centers, which were randomly selected considering the neighborhoods of the institutions as proxy for SES.

Eligible participants who had expressed their interest in the study were randomly selected and contacted by telephone until the required sample size was reached. At least 10 participants per group were initially planned and 42 interviews were conducted. The final number of participants was determined based on data saturation following an inductive thematic saturation model (Saunders et al., 2018). No new categories or themes were identified after the analysis of

Table 1. Questioning Routes Related to Changes in Parental Eating Habits.

I would like you to try to recall your eating habits before being a parent. What did you usually eat and drink? If you cooked or not . . .
[Probing questions applied when necessary]
If you try to compare the different stages[a] of becoming a parent, what do you think has changed, and why?
What do you think has changed in your eating and cooking habits during *pregnancy*? Why?
What do you think has changed in your eating and cooking habits during breastfeeding/*first months with the baby*? Why?
What do you think has changed in your eating and cooking habits during the *complementary feeding* (when the baby started to eat)? Why?
What do you think was healthy or unhealthy about your own diet throughout all those stages?
How about nowadays? What do you think has changed in your eating and cooking habits after becoming a parent?
Are there foods (and drinks) that you ate before (being a parent), that you don't eat now? Why?
Are there foods (and drinks) that you didn't eat before (being a parent), that you eat now? Why?

[a]The different stages were mentioned in case the participants did not refer to the stages they themselves felt to be meaningful for changes in eating behaviors. The three stages included in the interview guide are some of the most influential for dietary changes identified in previous studies (Aschemann-Witzel, 2013; Moura & Aschemann-Witzel, 2020).

approximately 30 interviews, suggesting that data saturation was reached.

Ethical approval was obtained from the Ethics Committee of the School of Chemistry of Universidad de la República (Uruguay). Each participant signed a written informed consent form and received a gift card worth US$25 and a book for their child as token of appreciation.

Data Collection

Recruitment and data collection were conducted between August and December 2019. Interviews were held at participants' home, at the educational institution, or at the University, depending on participants' preference.

A semi-structured interview guide was designed, which included key questions and follow-up probing questions. The interview included a series of questions related to parental feeding practices. The last module of the interview guide explored changes in parental eating habits in the transition to parenthood, which is the focus of the present study (Table 1). It is important to mention that, for the purpose of this investigation, there was no aim to focus on developing a definition of food/dietary healthiness. Instead, the focus was to explore the conceptualization of healthiness from participants' perspectives. Crucially, interviewees were reassured that no judgment was to be imposed on their eating patterns.

Interviews lasted between 45 and 90 minutes (average: 60 minutes) and were conducted by three research assistants with background in Sociology or Psychology and experienced with qualitative interviews. After the interview, participants answered sociodemographic questions, including age, gender, educational level, and a series of questions to estimate SES (low, medium, and high) according to a standard Uruguayan methodology (Centro de Investigaciones Económicas, 2018).

Data Analysis

The interviews were audio-recorded and transcribed verbatim. An inductive qualitative content analysis was used to identify and organize meaning units (codes), categories, and themes (Graneheim & Lundman, 2004) using the software NVivo. First, open coding provided a framework with key words related to the subject of interest. In this way, initial codes, categories, and themes were identified and followed an iterative process: an initial microanalysis with subsequent expansion and reorganization of codes into overarching themes. Fragments of the transcripts (participants' responses, narrations) were then arranged into the coding structure.

The first author read over the transcripts multiple times and did the first coding of the data, which was then checked by the second researcher. Both researchers met multiple times to discuss recurring ideas, emergent questions, and meaningful topics that were important to understanding changes in eating habits related to parenthood and any discrepancies were resolved by consensus. Compelling themes related to factors influencing changes in eating habits emerged. Those specific themes were organized by domains of the socioecological model and represented graphically. The socioecological approach considers five levels of contextual influence on healthy eating behaviors: individual (knowledge, attitudes, beliefs), interpersonal (family, peers, social network), community (social networks, norms, standards), institutional (organizations, social institutions), and structural (public policies, laws, and regulations; Schölmerich & Kawachi, 2016). Participants' quotes (presented in italics) were selected to illustrate major themes and were translated from Spanish to English. Words between brackets provide context where needed and three bracketed dots mean that part of the sentence was taken out.

Results

The characteristics of the 42 participants involved in the study are presented in Table 2.

The analysis of the interviews revealed three major themes: (a) perceived changes in eating habits in the transition to parenthood, (b) motives underlying perceived changes in eating habits, and (c) socioecological factors influencing changes in eating habits.

Table 2. Characteristics of the Participants ($N = 42$) Involved in the Study and Their Children.

Characteristic	No. of participants	%
Gender		
Female	38	90
Male	4	10
Age		
19–26	11	26
27–34	21	50
35–44	10	24
Parental status		
First-time parent	28	67
Educational level		
Primary school	1	2
Secondary school	19	45
Technical education	5	12
University degree	15	36
Postgraduate studies	2	5
Socioeconomic status[a]		
Low	15	36
Medium	12	29
High	15	36
Age of selected child		
6–23 months	20	48
2–5 years	22	52
Sex of selected child		
Girl	17	40
Boy	25	60

[a]Socioeconomic status was calculated using the Uruguayan socioeconomic status index, which is based on a series of questions (place of residence, number of people living in the household, number of minors living in the household, number of people with University degree in the household, number of people with publicly funded health care in the household, number of people receiving income in the household, number of cars owned by the household, domestic workers hired by the household; Centro de Investigaciones Económicas, 2018).

Perceived Changes in Eating Habits in the Transition to Parenthood

Only seven participants (17%) reported not having experienced any changes in their eating habit in the transition to parenthood, as exemplified in the following quote: *I haven't changed much. I've always been responsible for that, and I've tried to eat healthily*. Participants who stated no changes were usually the ones in the extremes of SES (highest/lowest). A few of the highest SES parents stated to have already adopted high levels of healthy eating prior to parenthood and that this did not change after having a child. Conversely, some participants from the lowest SES stated not to have the means to act upon their intentions to eat healthier after becoming a parent and therefore perceived no changes.

The vast majority of the participants ($n = 34$, 80%) perceived positive changes in their eating habits. Most informants stated that they did not eat healthily before becoming parents or that they did not care about their eating habits, as exemplified in the following quote: *You're alone and you don't have to think about food for another person . . . You enter extreme convenience . . . Pasta, junk food, anything that implies not much effort and dedication*. Becoming parents consisted in a major change for them. Interestingly, most of the participants stated that the positive changes in their eating habits remained stable and that they did not go back to their old habits.

Changes were identified in the three main stages of the transition to parenthood considered in the interview guide: pregnancy, the first months with the baby (including breastfeeding), and the beginning of complementary feeding (when the child starts eating solid foods). Most of the positive changes in eating habits occurred from the moment the mother became pregnant. In this period, interviewees reported a series of changes in their consumption of specific foods to achieve healthier eating patterns. As shown in Table 3, the identified changes during pregnancy included increased consumption of homemade meals, fruits, vegetables, pulses, fish, and water and reduced consumption of ultra-processed products (e.g., nuggets, soft drink, candies, instant soup, and ready-to-eat meals), fast food (e.g., street foods, take-away, delivery), and fried foods (e.g., *milanesas*). In addition, references to reduced consumption of stimulating beverages (mate and alcohol) and red meat were identified as perceived positive changes in some of the interviews. Increased concern about food hygiene was also reported.

Changes in eating habits during the first months with the baby were less frequently mentioned compared with pregnancy. As shown in Table 3, changes were related to the consumption of specific foods and beverages (e.g., increased water intake and increased oat consumption).

The start of complementary feeding represented a second period when positive changes in eating habits occurred. Changes were associated with the dietary recommendations for the baby and included increased consumption of foods and beverages recommended by the Uruguayan dietary guidelines (e.g., homemade foods, fruits, vegetables and pulses, fish, water), reduced consumption of ultra-processed products and fast foods, less frequent addition of salt to food preparations, a more structured meal pattern, and increased concern with food hygiene.

Although most of the participants reported positive changes in their eating habits, negative changes were also identified in the narrations of three participants (7%, two from low SES and one from medium SES). However, two of those participants reported both positive and negative changes. The three participants reported having increased consumption of fried foods and chocolate during pregnancy, to have a more unstructured meal pattern and to avoid broccoli and pepper (as they were believed to cause digestive discomfort in the baby through breastmilk) during the first months with the baby.

Motives Underlying Perceived Changes in Eating Habits

As shown in Table 4, a wide range of motives for changes in eating habits were identified. Positive changes were mainly

Table 3. Perceived Changes on Healthiness of Eating in the Transition to Parenthood.

Type of perceived change	Perceived change	Stage where the change occurred	Example of quotes
Positive changes in eating habits (34 participants, 80%)	Increased consumption of homemade meals	Pregnancy Complementary feeding	[before being a mother] *I ate much worse than nowadays. As we were alone with my husband sometimes we didn't cook, we prepared a sandwich with chocolate-flavored milk or cooked junk food. Now we try to cook and eat thanks to them* [daughters]. *We eat healthier and homemade thanks to them, for preparing the meals for them.* (Female, low SES)
	Increased consumption of fruits, vegetables and pulses	Pregnancy Complementary feeding	*I was 20 years old and had never eaten broccoli I think. Now* [after motherhood] *I regularly eat broccoli.* (Female, medium SES) *I didn't prepare salads other than tomato and lettuce. Before, salads were like that. Now, it's the other way around. I go to the farmers' market and I buy leaves of all types, colors and sizes.* (Female, high SES)
	Increased consumption of fish	Pregnancy Complementary feeding	*I ate fish, which I have never eaten before. That is, I wasn't used to eat fish and I started eating fish because of them* [daughters]. *Because the gynecologist told me about brain development and so on, so I started eating more fish.* (Female, high SES)
	Reduced consumption of ultra-processed foods and fast food	Pregnancy Complementary feeding	*So . . . I think that before I used to eat badly and now I am ok, eating well. I ate many fried foods, a lot of fast food let's say. Junk food*, alfajores, *candy, those types of things. Now I don't . . . I don't care for those things.* (Female, medium SES) *Before becoming a mother* [I used to eat] *worse than now, for sure worse. I ate a lot of fast food, much more processed foods and not to so many homemade meals* [. . .] *Always the same: pies, empanadas and sometimes* milanesa *with French fries.* (Female, low SES)
	Reduced consumption of fried foods	Pregnancy Complementary feeding	[. . .] *before* [being a mother] *I didn't limit meat or fried foods.* (Female, high SES)
	Decreased mate intake	Pregnancy First months with the baby	*During pregnancy I took care of myself a lot . . . I didn't drink* mate. (Female, high SES)
	Exclusion/reduction of alcohol	Pregnancy First months with the baby Complementary feeding	[. . .] *during breastfeeding I was very careful with alcohol.* (Female, low SES)
	Reduced red meat consumption	Pregnancy Complementary feeding	[before being a mother] *I ate less vegetables and much more meat.* (Female, high SES)

(continued)

Table 3. (continued)

	Perceived change	Stage where the change occurred	Example of quotes
	Increased food hygiene	Pregnancy Complementary feeding	*Food hygiene, disinfection, washing. I didn't have the habit before, but I acquired it during pregnancy, like handling raw meat. That and hand washing. For example, now there is an antibacterial soap in the kitchen. It wasn't there before.* (Female, high SES)
	Increased water intake	First months with the baby Complementary feeding	*During breastfeeding I ate everything that came close to me* [laughter] *and I drank 10 liters of water per day. Everybody was shocked about the amount of water I drank. But now I keep drinking water, I drink 2 liters per day for sure, I drink a lot of water.* (Female, medium SES)
	Increased oat consumption	First months with the baby	*It was like "follow your mother's advice", old people's stuff. To have milk you have to eat oat, so then I started eating oat and I even liked it.* (Female, medium SES)
	Adding less salt to food preparations	Complementary feeding	*I took salt away because* [child's name] *eats with us. We cook pasta without salt, rice without salt and you get used to it. Before we were like "This lacks salt!" but now we got used to eating without salt so that they can eat with us. To prepare the same meals for everyone, and that's great.*(Female, high SES)
	Meals at fixed times, less snacking	Complementary feeding	*It is different* [now] *because you have a fixed time to eat, because when you don't have children you don't mind eating at 2PM. For them, it comes at a certain time* [when they have to eat]. (Female, low SES)
Negative changes in eating habits (three participants, 7%)	Increased consumption of fried foods and chocolate due to cravings	Pregnancy	*French fries. During pregnancy I wanted to eat French fries. I wanted a plate full of French fries, ketchup, mayonnaise, mustard or whatever. Now I don't do that anymore.* (Female, low SES)
	Unstructured meal pattern	First months with the baby	*Breastfeeding is hard. It is a period in which you know that you have to eat healthily but at the same time it's hard because you don't have enough time to cook every day and eat two meals, snacks, breakfast, lunch. At the beginning it was complicated, it wasn't because we didn't care.* (Female, low SES)
	Decreased consumption of pepper and broccoli due to the belief that they could cause discomfort to the baby	First months with the baby	*During breastfeeding, at the beginning there were a lots of myths about foods that could affect . . . that could cause the baby gasses if I ate them . . . I don't know, broccoli could cause I don't know what . . .* (Female, medium SES)

Note. SES = socioeconomic status.

Table 4. Motives Underlying Perceived Changes in Eating Habits in the Different Stages of the Transition to Parenthood.

Type of perceived change	Motives underlying the perceived changes	Example of quotes (separated by phase in the transition to parenthood)
POSITIVE changes (34 participants, 80%)	*Pregnancy*	
	Sense of responsibility to protect baby's and own health	*I started cooking when I became a mom. I mean from pregnancy because that was when I said "I can't keep on eating the junk I buy anywhere, having a crazy life and not having time for cooking. I buy anything in a street food site or a milanesa at any place". Then, I quitted consuming a lot of fat and everything I liked. I started taking care of myself for him* [son]. (Female, medium SES)
	Increased interest for food product composition and food safety	*Some things changed . . . I became more conscious . . . At the time of choosing foods and other things you buy, paying more attention to labels, right? Checking the ingredients.* (Female, high SES) [. . .] *after becoming a mother I worry about whether the fish I buy at the farmer's market is safe or not.* (Female, high SES)
	Weight concerns	*I didn't want to gain forty kilos, so I controlled a lot what I ate* [during pregnancy]. (Female, high SES)
	Maternal health issues (gestational diabetes, acid reflux)	*I used to drink Sprite. I stopped drinking it during pregnancy due to acid reflux and after that as I don't allow* [child's name] *to drink. I don't have it at home.* (Female, medium SES)
		First months with the baby
	Concerns about breastmilk quality	[During breastfeeding] *I think that certain flavors are transmitted through the milk and if you drink a lot of caffeine it can make the baby more irritable or something like that.* (Female, high SES)
		Complementary feeding
	Adapting own diet to child's schedule and needs	*Our schedule changed when* [child's name] *started eating because. . . I was like . . . well, when I'm hungry I'll see what I eat, what I cook, what I prepare . . . I didn't care if I ate at 12 or at 3 PM. Nowadays with* [child's name] *that changed. I don't spread meals many hours apart.* (Female, medium SES)
	Increased value attached to family meals	*Now that I have a family, eating is part of the family, sharing a meal, a dinner, is completely different. Before, I could skip dinner or eat just a pie in front of the computer and there was no problem about it.* (Female, high SES)
	Willingness to act as a role model	[. . .] *I think that you teach by example, right? If I sit down and I eat the same as they do, I am teaching them too, right?* (Female, high SES)
NEGATIVE changes (three participants, 7%)	*Pregnancy*	
	Cravings	*During pregnancy . . . during that period I ate a lot, quite a lot . . . It was kind of an excuse, you know? I had to rest and therefore I didn't cook much. They [relatives] helped me and I ate quite a lot and used to have . . . how do you say it? When you want to eat something like chocolate . . . "Cravings?" "Yes, I had cravings all the time"* (Female, medium SES)
	First months with the baby	
	Time constraints	*It happened during breastfeeding. I breastfed during the completely first year and I didn't cook anything. I didn't have time, I didn't have a life.* [laughs] (Female, low SES)
	Fatigue	*We were so exhausted and tired that he said* [husband] *"let me at least indulge myself with food" . . . "Let me please myself. We aren't sleeping, we don't have time for anything. Then, at least let me buy a chivito"* (Female, low SES)

Note. SES = socioeconomic status.

related to increased health consciousness, increased interest in food, increased value attached to family meals, and willingness to act as a role model. The motives underlying positive changes in eating habits differed across the different stages of the transition to parenthood. Positive changes during pregnancy occurred due to a sense of responsibility for the health of the baby and increased interest for food product composition and food safety, mostly due to medical recommendations to avoid food intoxication. In addition, some mothers declared having made changes in their consumption of specific foods to avoid weight gain and due to health issues during pregnancy (gestational diabetes, acid reflux). Positive changes

in eating habits during the first months with the baby were mainly focused on breastmilk production and quality (e.g., consumption of oat to increase breastmilk).

The main reasons underlying positive changes during complementary feeding included the need to adapt parental eating habits to the child's needs and schedule. Before parenthood, food choices were remembered to be frequently a last-minute decision and included more snacking. However, at the start of complementary feeding parents reported further reliance on meal planning and increased interest in healthy foods, due to feelings of responsibility (for child's health), more value attached to family meals, and willingness to be a good role model. Nevertheless, some parents stressed that their eating habits were focused on their child's health and not on their own, as exemplified in the following quote: *Actually, we don't do it* [eat healthy] *to say "let's eat healthily ourselves also." It is more for him* [son], *to include him in everything and to prevent him from feeling like "oh, my parents drink Coke and I drink water."* Willingness to create a healthy food environment for the child motivated some parents to try to do things differently compared with their own food upbringing, as shown in the following extract: *I tried broccoli, eh . . . around my thirties, right? And . . . cauliflower, I don't know, those things that weren't cooked at my* [childhood] *home.*

As for motives underlying negative changes, time constraints appeared prominent in the discourses. Participants who reported negative changes in eating habits during pregnancy attributed them to cravings for specific foods. During the first months with the baby, two participants reported negative changes in their eating patterns related to more unstructured meal pattern due to the demands of the newborn. In this sense, a few participants reported not having time nor energy to cook for themselves in this stage.

Socioecological Factors Influencing Changes in Eating Habits

The interviewees spontaneously mentioned factors influencing changes in eating habits in the transition to parenthood. Both barriers and facilitators for positive changes were identified and categorized into four levels of the socioecological model: individual, interpersonal, institutional, and structural (Figure 1).

Barriers to Positive Changes in Eating Habits

SES was a prominent factor associated with difficulties for making positive dietary changes among parents from low SES. Interviewees referred to the financial constraints they faced to afford some healthy foods, as exemplified in the following quote:

> *Everything is very expensive. Fruits and vegetables even more, and I'm not even talking about meat. I would like things to be different to have more variety and availability to eat, and to eat whatever we want without having to look at the prices or buying pasta in 5 kg packages.*

Time pressure was also a relevant individual factor that acted as a barrier for positive changes in eating habits in the transition, making the preparation of homemade meals a challenging task. This barrier emerged more frequently in the narratives of parents from low SES, motivated by institutional factors such as long hours of work and commute.

Interpersonal factors were not explicitly identified as barriers to healthier eating. However, mothers' narrations revealed that women are the most (if not the only) interested in eating healthy (with three exceptions among the participants), as exemplified in the following: *I've always eaten well, pretty balanced. I can't tell the same about my boyfriend* [laughs]. This suggests that the lack of interest in healthy eating among fathers may act as a barrier for positive changes in eating habits.

At the structural level, some parents complained about the price of fruits, vegetables meat and fish, and the low accessibility to good quality fish (in terms of price and food safety standards).

Facilitators for Positive Changes in Eating Habits

One of the main facilitators for positive changes in the transition to parenthood was related to concerns about child's health and the motivation to be a good role model. In addition, planning skills were identified as a facilitator for healthy eating after motherhood (e.g., cooking extra amounts of food during the weekends).

At the interpersonal level, support from other family members facilitated positive changes in eating habits. In some cases, fathers contributed to healthy eating, for example, by preparing homemade meals: *I didn't have time, nor life* [during the first months with the baby] . . . *My husband cooked something . . . or we cooked very simple things without much preparation*. Grandparents also contributed to healthy eating by providing support and preparing home-cooked meals, as exemplified in the following quote: *My mother helped me a lot, she was always there. She cooked for me and all that*.

Institutional factors acting as facilitators for positive changes were also identified. Parenthood increased access to nutrition information by health professionals (nutritionist, pediatrician), which increased knowledge and awareness about healthy eating. A few mothers indicated to be very interested in health eating and to apply the knowledge acquired in the daily family diet. In addition, the possibility of working from home or having flexible working hours was associated with positive changes in eating habits after having a child.

Discussion

Overall, results from the present work showed that early parenthood was mostly perceived as a window of opportunity

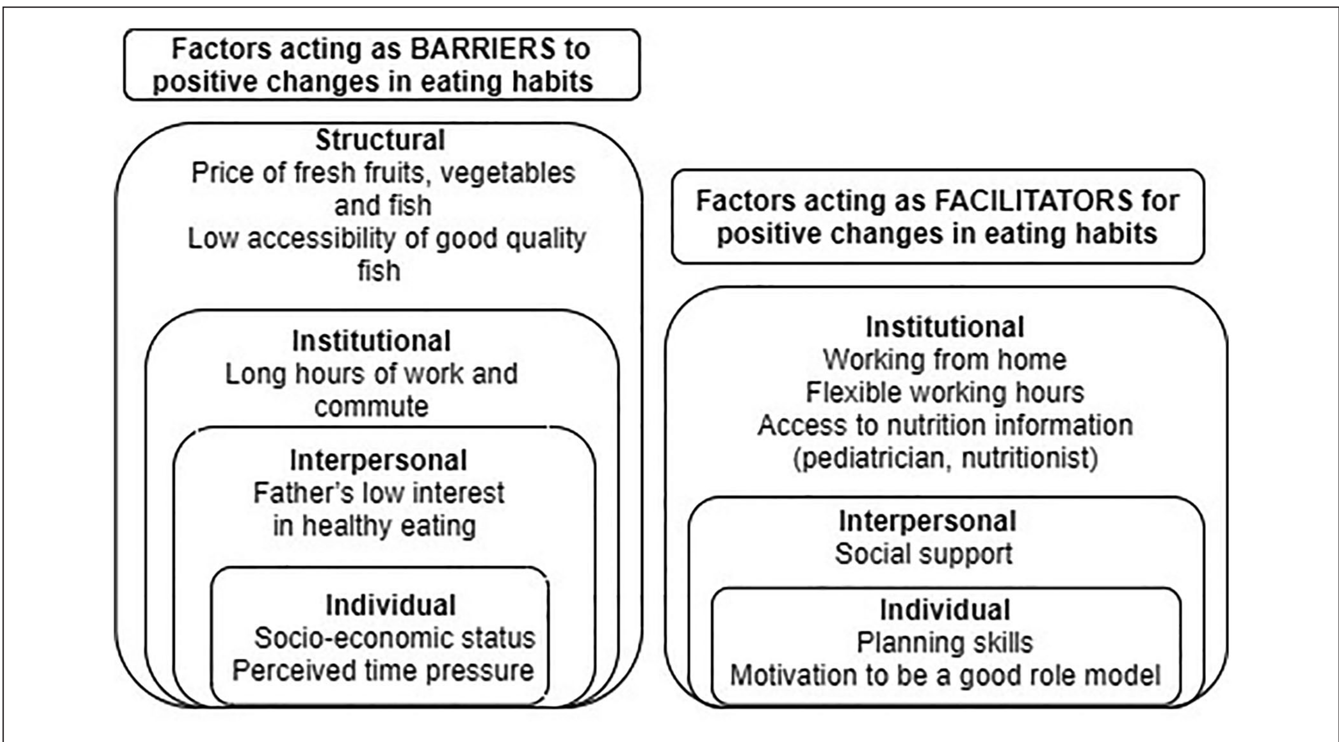

Figure 1. Factors influencing changes in eating habits in the transition to parenthood identified in the interviews, categorized using the socioecological model.

for positive changes in eating behaviors for Uruguayan parents. Results are in agreement with previous studies reporting that this period in life is typically characterized by positive changes in eating patterns (Devine et al., 2000), including increased consumption of fruits and vegetables and home cooking (Edvardsson et al., 2011; Olson, 2005). In this sense, most of the perceived changes mentioned by the participants of this study were aligned with the recommendations of the Uruguayan dietary guidelines: increased home cooking, decreased consumption of ultra-processed foods, inclusion of fish, reduction of processed meat, and increased consumption of fruits and vegetables (Ministerio de Salud Pública, 2016).

Most of the changes in eating habits reported by parents corresponded to pregnancy and the start of complementary feeding. During pregnancy, mothers reported changing their eating habits due to increased interest in health and a sense of responsibility to protect baby's health. Meanwhile, during complementary feeding, changes in eating habits were related to matching their own eating habits to children's needs, as well as the motivation to become a good role model to promote healthy eating. These patterns have been described in other studies. French mothers, for example, regarded early parenthood as a critical moment for dietary changes to avoid exposing the baby to "dangerous" and unhealthy substances (which, in their words, were mostly found in ultra-processed foods; Moura & Aschemann-Witzel, 2020). Beliefs about risks to the child's health appear to be, indeed, a primary driving force for parental lifestyle change. Also, having a child may trigger parents to reflect on their eating habits and in which way their own habits can influence their child's health (Edvardsson et al., 2011). Setting a good example becomes important and the willingness to create a health-promoting environment for the child motivates parents to eat healthily (Edvardsson et al., 2011; Hartmann et al., 2014; Moura & Aschemann-Witzel, 2020).

Nevertheless, the transition to parenthood also implied negative changes in eating habits for a minority of participants, particularly an increased consumption of unhealthy foods due to cravings and a less structured meal pattern due to difficulties to conciliate baby and parent's life. Those aspects have also been previously mentioned by mothers in other countries and were related mostly to the first months of the baby (Aschemann-Witzel, 2013; Moura & Aschemann-Witzel, 2020). The negative implications of this moment of the transition for the mother's and family's health deserve further exploration. A perceived decrease in healthy eating in this phase indicates that some new parents might need more awareness of the upcoming challenges and more help for healthy eating in this period (Aschemann-Witzel, 2013).

Applying the socioecological model to analyze parents' narrations allowed to critically observe that changes in eating habits in the transition to parenthood do not only depend on the individual. Instead, structural factors and social inequality also play important roles (Johansson et al., 2013). SES was

identified as a relevant factor restraining positive changes for low SES parents, in agreement with previous studies conducted in Uruguay and some high-income European countries (Ares et al., 2017; Drewnowski & Darmon, 2005). In this sense, the perceived high price of fruits and vegetables (in relation to the income of low SES families) was identified as a pivotal issue. Low-income families from other Latin American countries also reported financial difficulties for buying fruits and vegetables (de Morais Sato et al., 2017; Herran et al., 2019). The low accessibility of fresh healthful foods among the poor in Latin America exposes social injustice and the inefficiency of the current food systems, oriented toward the production of ultra-processed products based on a small number of commodities (Swinburn et al., 2019). Although Latin America is among the places of the world with the highest production of fruits and vegetables (Food and Agriculture Organization, 2019), local food environments are inequitable for many citizens in terms of affordability of those foods. Therefore, results from the present work stress the need to achieve more equity-sensitive food systems, where the access of healthful foods by low SES consumers is acknowledged (Global Nutrition Report, 2020).

Concerning facilitators for positive changes in eating habits in the transition to parenthood, some of the findings extend the work of Machin et al. (2018), who explored barriers and facilitators for the adoption of the Uruguayan dietary guidelines. The facilitators pointed out by those authors were mainly at the structural level (e.g., polices and regulations, nutrition education), whereas the findings here add individual motivations related to early parenthood (e.g., willingness to act as a good role model, adapting to baby's eating schedule and dietary needs), as well as factors related to interpersonal level. Social support from family members acted as a facilitator for positive changes. Social support seems, indeed, important to prevent unfavorable eating patterns, especially during the first months with the baby (Moura & Aschemann-Witzel, 2020). The transition to parenthood is a major adjustment period within a family and support from others seems crucial to make this transition easier for parents (Deave et al., 2008). In this sense, increasing fathers' engagement in healthy eating and feeding practices seems also necessary. This is particularly relevant considering changes in fathers' role with families occurred over the last century: they have increased their responsibility in child rearing (Vaughn et al., 2016). Despite this, most research has focused on maternal influences on eating behavior and research on how fathers influence their children's dietary intake is still scarce (Rahill et al., 2020).

The study also identified institutional aspects related to work life that affect eating patterns among parents. In particular, working from home and having flexible working hours seem advantageous for positive changes in families' eating. As time constraint has been identified as a common factor influencing families' diet of working parents (Bava et al., 2008; Morin et al., 2013), modalities of work that allow time for food-related activities in the transition to parenthood deserve further exploration to promote healthy habits (Johansson et al., 2013).

Another important strategy for public stakeholders entails favoring nutrition education programs in early parenthood, to take maximum advantage of this window of opportunity. Such programs should build up on different levels of influence of the socioecological model on families' eating. Essentially, it is important to acknowledge the constraints set by a society in which people have unequal possibilities to change their diets in a healthier direction when becoming parents.

Limitations and Recommendations for Future Research

To the authors' knowledge, this is one of the first studies exploring Latin American parents' perceptions of changes in eating habits related to parenthood. Despite its strengths, the study is not free of limitations. First, the study is based on participants' self-report of the changes in eating patterns in the transition to parenthood. Thus, the findings have to be interpreted in the light of its limitations that include the possible difficulty of accurately recalling past eating habits (particularly for parents of 2–5 years old children), the subjective assessment of healthiness of eating, and the possibility of social desirability effects on participants' narrations (Flick, 2018; Olson, 2005). Further research is needed to obtain quantitative information about changes in eating habits to confirm the observations of reported in the present study, ideally using a longitudinal assessment. In addition, it would also be interesting to investigate how parents' eating habits continue to evolve through the later phases of parenthood (e.g., adolescence).

Conclusion

Early parenthood was identified as a life event favorable to changes in eating habits for the majority of parents involved in the present work. The results thus add to the life course framework, describing reasons and motives to explain why transitional events in life impact food choices and eating habits, and indicate that early parenthood consists of a window of opportunity for public efforts to promote healthier eating.

Positive dietary changes were prominent during pregnancy and complementary feeding phases. Concerns about the child's health and willingness to be a good role model were the main motivations for positive changes. However, the findings from the present work stress that strategies to overcome the barriers faced by parents are needed. In particular, emphasis should be placed on the provision of financial assistance to facilitate access to adequate and nutritious foods among low socioeconomic groups, and the implementation of work-related benefits for mothers of infants and young children to reduce time pressure.

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