



OCTOBER 2022

METHODES AND GUIDANCE

THE NEW RECOMMENDATIONS ON COMPLEMENTARY FEEDING FOR CHILDREN UP TO 3 YEARS OF AGE

Abstract

In France, dietary guidelines have been publicised since 2001 as part of the National Nutrition and Health Programme (*Programme national nutrition santé*, PNNS). New scientific data and recent reports from the French Agency for Food, Environmental and Occupational Health and Safety (*l'Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail*, ANSES) and the High Council for Public Health (*Haut Conseil de santé publique*, HCSP) prompted the General Directorate for Health (*Direction générale de la santé*, DGS) to charge Santé publique France with updating dietary guidelines for all populations. The new recommendations for adults on diet, physical activity and sedentary behaviour were published in February 2019 (Delamaire *et al.*, 2019). In September 2021, Santé publique France published its new recommendations regarding complementary food for children up to 3 years of age, in the form of a multimedia communication campaign.

Santé publique France has used a participatory approach to build recommendations that are both clear and achievable for parents, and easy for professionals to use in their routine practice. These recommendations include two complementary components: dietary recommendations – also covering physical activity and sedentary behaviour – and advice for parents on educational strategies around complementary feeding then family meals. At the same time, research was done to establish which formats would be best suited to disseminating these messages. This resulted in the creation of a 36-page brochure and a poster for parents showing a table of foods to introduce during the first 3 years of childhood. Additional resources and content were also recommended in order to offer parents a range of tools adapted to their preferred media (leaflets, videos, website, menus, recipes), which together formed a comprehensive communication campaign. A document summarising the new recommendations has also been drawn up for professionals working in health and early childhood.

Santé publique France was supported in this work by a committee that brought together specialists who have direct contact with the populations concerned (healthcare, maternity and children's services, childcare), particularly the least well-off, with epidemiologists and professionals from the fields of health promotion and prevention, information and communication, and research into children's eating behaviours.

A number of study phases were carried out in association with parents, including those from modest backgrounds, and with the paediatricians who relay these recommendations, allowing for the choices of wording to be approved or revised throughout the design process. Some of these studies were conducted by the Centre for Taste and Feeding Behaviour (*Centre des sciences du goût et de l'alimentation*, CSGA) at the French National Institute for Agriculture, Food and Environment (INRAe) as part of the European project Edulia, and others by Santé publique France.

Santé publique France also consulted the various bodies involved in the renewal of the recommendations – DGS, ANSES and HCSP – to ensure that the public outreach work was consistent with the scientific opinions of ANSES and the HCSP.

These new recommendations from Santé publique France were publicised in a communication campaign launched in autumn 2021.

KEYWORDS: METHOD, DEVELOPMENT, RECOMMENDATIONS, GUIDELINES, PARENTS, NATIONAL NUTRITION AND HEALTH PROGRAMME (PNNS), COMPLEMENTARY FEEDING, EDUCATIONAL STRATEGIES, PHYSICAL ACTIVITY, SCREENS, SLEEP

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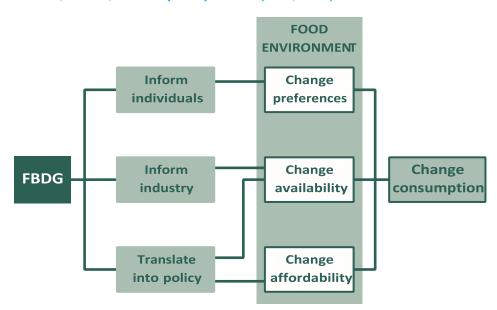
GENERAL FRAMEWORK

Why are dietary recommendations needed?

According to the Food and Agriculture Organization of the United Nations (FAO), Food Based Dietary Guidelines (FBDG) are "short, scientific-based, with practical and accessible messages. Thus, they may help consumers to make healthy food choices and to adopt a healthy lifestyle, allowing them to achieve a satisfactory nutritional state and help prevent malnutrition in all its forms. Unlike dietary reference values – which are standards applicable worldwide – FBDG are adapted to specific nutritional, geographical, economic and cultural conditions (FAO, 2016).

In addition to helping consumers with their dietary choices, FBDG can also serve as a reference for establishing nutritional standards in different settings – meals served in schools and healthcare facilities, food-aid programmes – or to guide the food supply. Therefore, they are likely to have repercussions on consumption as they inform individuals and manufacturers in the food sector, and guide policies. This means they may affect the "food environment" of the population (see Figure 1):

Figure 1. Three main paths by which food-based dietary guidelines can affect the food environment and, in turn, consumption patterns (FAO, 2016)



In some countries, recommendations as defined by the FAO have been publicised to the general public by governmental bodies for several decades. In France, developing and publicising the official national recommendations on diet and physical activity has taken place within the National Nutrition and Health Programme (PNNS), launched in 2001.

These "PNNS guidelines" have been defined for several populations: children and adolescents, adults, pregnant women, people over 55 years of age and vulnerable elderly people. They are promoted and distributed among the general public through various communication channels (printed guides, the website mangerbouger.fr, media campaigns, etc.) and by professionals working in health, early childhood, the social sector and national education.

Since the first guidelines were created in 2001, scientific knowledge has evolved regarding links between diet and health, as well as between physical activity or sedentary behaviour and health. Lifestyles and consumption patterns have also changed. This called for a revision of the French guidelines, as performed in other countries, to integrate this new knowledge. In 2019, Santé publique France published new dietary recommendations for the adult population (Delamaire *et al*, 2019). The publication of new recommendations regarding complementary feeding for children up to the age of 3 years followed in 2021.

The particular case of complementary feeding

Early childhood from birth to 36 months is a period of rapid growth and intensive development of neurological, gastrointestinal and cognitive functions, and oral abilities. This period consists in part of the "first 1000 days" (from conception to the child's second birthday), now recognised as a critical window of sensitivity, during which each individual acquires the health capital that sets them up for their whole life (Simeoni, 2019). At this time, the body is particularly sensitive to its nutritional environment, which is likely to influence development and long-term health (ANSES, 2019 and HCSP, 2020).

The child's first 3 years are also an essential phase of knowledge acquisition, intellectual and social construction. Diet is closely involved in these development processes, through the choice of foods that are gradually introduced, the inputs that are quantitatively and qualitatively adapted to changing needs, and the learning conditions offered to the child (Pérez-Escamilla et al, 2019). It is also during this time that significant changes in diet occur and the habits formed in terms of diet, physical activity and sleep will largely define adolescent, then adult, behaviour (HCSP, 2020).

The educational practices of parents, relatives and the broader social circle will have a strong influence on the child's acceptance of new foods during complementary feeding (Pérez-Escamilla *et al*, 2019; HCSP, 2020).

Given this context, the dietary recommendations for children up to 3 years of age have been re-evaluated and reworded for parents, but also for professionals in contact with parents and young children. The previous guidelines have been widely distributed among the population and healthcare professionals since 2004, in particular through the *Nutrition Guide for All Parents* (*Guide nutrition pour tous les parents*, INPES, 2004). The food introduction table that featured in this guide is also included in the personal health booklet given to every child at birth. The new recommendations result in substantial changes to this table.

Drafting the French recommendations

Developing the scientific base: ANSES and HCSP

In France, the scientific base used to establish recommendations concerning diet, physical activity and sedentary behaviour for children up to 3 years of age was developed by the French Agency for Food, Environmental and Occupational Health and Safety (ANSES). This work was carried out at the request of the General Directorate for Health (DGS). ANSES published its opinion concerning updates to the dietary guidelines for children aged 0–3 years old in June 2019 (ANSES, 2019). Several parameters were integrated into the revisions:

- Recent dietary recommendations from health agencies in France and Europe;
- Dietary reference values established by the European Food Safety Agency (EFSA);
- Scientific studies into the relationship between food group consumption and disease risk:
- Studies into current nutritional intake and dietary practices in the population, including the third individual and national study on food consumption (Étude individuelle nationale des consommations alimentaires, INCA 3) (Anses, 2017) and the study of total infant diet (Étude de l'alimentation totale infantile, EATi), both conducted by ANSES.

The scientific recommendations from ANSES were interpreted by the High Council for Public Health (HCSP), who published an opinion in June 2020 that incorporated an economic and environmental perspective, as requested from the DGS (HCSP, 2020). In addition to the dietary recommendations, parents' educational practices were also discussed by ANSES and the HCSP.

Turning scientific data into public knowledge: Santé publique France

The contribution of Santé publique France is based around two operational objectives of the 4th National Nutrition and Health Programme (PNNS4). These are:

- Promoting a healthy diet and physical activity to parents of young children (Objective 11);
- Providing early childhood professionals and families with tools that foster healthy behaviours (Action 28).

For this work, Santé publique France used a participatory approach that incorporated the experience and expertise of professionals and researchers in healthcare and early childhood, as well as the opinions and values of the various audiences.

METHOD

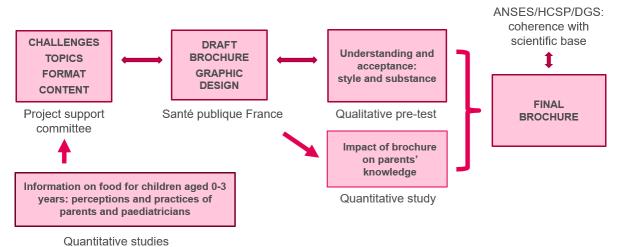
The development process

To develop recommendations and multimedia content for the general public and professionals, Santé publique France put the following actions into motion (see Figure 2):

- Creation and governance of a project support committee bringing together professionals with multidisciplinary skills
- Creation of information and communication resources for the general public (brochure + poster): drafting texts and proposing graphic layouts
- Studies on samples of parents to:
 - Find out about their needs and perceptions regarding information on complementary feeding
 - Assess how the new recommendations were received, retained and accepted (content, level of information, possible formats and mock-up projects)
 - Measure the effect of reading the brochure on knowledge
- A study on a sample of paediatricians to find out about their needs and their perceptions
 of existing information on complementary feeding
- Content development and prototype design for the brochure based on the results of the studies
- Consultation with ANSES and the HCSP to ensure coherence between the recommendations formulated by Santé publique France and their respective scientific opinions; as well as with the DGS regarding the objectives of PNNS4
- Finalisation of the brochure, the reference point for all resources produced thereafter

The entire process took place from November 2019 to September 2021 (see Figure 2).

Figure 2. Santé Publique France methodology



Project support committee

Santé publique France set up a project support committee that in addition to the agency's own expertise in epidemiology, prevention, health promotion and communication – brought together a researcher in child behavioural science and a postgraduate student from INRAe, along with various healthcare professionals, especially from the maternity, infant and early childhood sectors (composition of the committee: Appendix 1).

After examining the public declarations of interest made by the project support committee, the Santé publique France internal ethics committee declared that no members had any conflicts of interest and they were individually appointed for 1 year. The committee met eight times, for full or half-day sessions, from November 2019 to June 2020.

Objectives of the committee

- To formulate advice for parents about educational practices around complementary feeding
- To formulate the dietary recommendations for children aged 0–3 years, based on the opinions of ANSES and the HCSP

The group was coordinated by the Food and Physical Activity Unit at Santé publique France. Their work focused on studying the scientific background provided by ANSES and the HCSP, on carrying out in-depth analysis of the multimedia resources identified by committee members and Santé publique France, and on knowledge sharing and feedback from healthcare and early childhood professionals.

This work was used by the Santé publique France teams as the raw material to produce both the brochure for the general public and the poster summarising the recommendations for parents.

The committee was also consulted when preparing the protocol for pre-testing the recommendations and the brochure (qualitative study).

Resources used

Scientific background

- ANSES opinion on updating the PNNS dietary guidelines for children aged 0–3 years (ANSES, 2019).
- HCSP opinion on the revision of dietary guidelines for children aged 0–36 months and 3–17 years (HCSP, 2020).

Prior work conducted by Santé publique France (2015)

 Qualitative post-test of the Nutrition Guide for Parents of Children under 3 years of age distributed since 2004 by the Institute for Health Education and Prevention (INPES, now incorporated into Santé publique France). Unpublished report.

French and international resources

Various communication resources (printed documents, websites, videos) were chosen by Santé publique France and the members of the committee. Each resource was analysed by two rapporteurs using a custom-designed grid. The list of resources analysed and the evaluation grid are presented in the appendix.

The committee members also presented complementary resources used in their own practice.

Challenges

Previous studies conducted in preparation for the adult recommendations produced in 2018 found that the public expected simple and concrete nutritional justifications for any new advice or change to previous advice (Delamaire *et al*, 2019). In order to succeed in fostering new parenting skills, it was therefore important to integrate the following notions:

- Any changes to previous practices or advice given by professionals must be clear and achievable;
- Parents should be supported in a way that is not prescriptive and does not stray too far from the realities of family life or available means;
- Consideration should be given to the fact that some of the advice could potentially be anxiety-inducing;
- The end-objective is to encourage the family to progress towards a general diet based on the "adult" recommendations (Delamaire *et al*, 2019).

The committee was intent on producing educational recommendations and advice that are:

- Clear, acceptable and achievable for as many parents as possible;
- Equally useful for early childhood professionals, including health professionals and any facility involved in feeding children;
- Accompanied by practical examples or tips.

Decision-making process

Educational advice

The committee members suggested a list of topics aimed at fostering new parenting skills:

- based on behavioural approaches responsive feeding and shared responsibilities, as well as the importance of the context in which the meal takes place (approaches recommended in the opinions of ANSES and the HCSP);
- that draw on their own practices and experience with the different types of parents they work with:
- that address the "educational advice" priorities identified by the sub-groups in their analyses of existing resources.

They also felt that there was a need to address baby-led weaning (BLW), a fairly new approach that early childhood professionals in the group found parents regularly asked them about. It should be noted that BLW differs from the recommendation to start complementary feeding between 4 and 6 months and not beyond 6 months. For BLW, the child must be able to sit upright unassisted to avoid choking. However only 50% of children meet this milestone by 6 months.

Dietary recommendations

The committee members compared their knowledge and practices with the opinions of the HCSP and ANSES. They proposed priorities based on their own experience, as well as on the essential changes that need to be known and accepted by the professionals who pass on these recommendations to the population.

Resource evaluation and recommendations

The Committee embarked on a formal process of reflection to decide which resources should be produced by Santé publique France. This included:

- Analysis of existing resources.
- Recommendations of resources to be produced by Santé publique France considering the advantages/disadvantages of distribution channels for different target audiences in order to identify suitable formats.
- Prioritisation of the issues and questions to address, according to the type of media.

These different choices, whether relating to the definition of priorities or communication resources, were backed up or overturned by the various studies carried out. The committee also recommended the creation of a detailed brochure. The content of this brochure could then be adapted to a range of other formats (simple leaflets, videos, websites, etc.) in order to reach different audiences via their preferred information channels. The committee also stressed the importance of proposing menus and recipes to help parents in their daily lives.

Consequently, the Santé publique France teams produced a detailed brochure and a poster summarising the recommendations for parents. Various materials were also developed as part of the communication campaign that ran in the final trimester of 2021.

Studies: protocols and results

A scientific partnership with the CSGA

Santé publique France and the Centre for Taste and Feeding Behavior (CSGA) at INRAe have established a scientific collaboration within the framework of a European project called Edulia. This project is a response to Europe's urgent need to find new ways to combat the growing problem of obesity by promoting a healthier diet from childhood.

As part of this partnership, several formative studies were carried out to help steer content development and resource choices, and these fed into the work of the committee. Three quantitative studies were then conducted among parents (Studies 1 and 3) and paediatricians (Study 2).

Another study set up in March 2022 by the CSGA will help us understand the impact of the recommendations on parents in a few years' time. This is an interventional study, based on a randomised controlled trial, which aims to assess the impact of the information provided to parents on children's BMI, early feeding practices and dietary behaviour of children up to 3 years of age. The brochure developed by Santé publique France and a smartphone application with the same content as the brochure are the two resources used in this study.

Studies conducted: objectives and methods

Objectives

The objective of Studies 1 and 2 was to explore the perceptions and needs of parents or paediatricians regarding information on complementary feeding (De Rosso et al, 2021 and 2022a). Study 3 aimed to evaluate the short-term effects of reading the brochure on parental knowledge about child feeding, distinguishing knowledge accuracy and certainty (De Rosso et al, 2022b).

A fourth qualitative study was conducted by Santé publique France among parents. Its first objective was to test the parents' understanding and acceptance of new dietary recommendations and advice related to educational practices during complementary feeding. A second objective was to test two types of illustrations and the proposed graphics for the brochure, and to ascertain how useful parents found the videos and smartphone application.

Methods

Study 1 was based on data collected online from 10 to 29 January 2020 by a private research and consulting firm (BVA), from a sample of 1000 parents of at least one child under 4 years of age. Parents were selected using the quota method, which was applied to the following variables: parent's age, profession of contact person for the household, region, settlement hierarchy category, parent of one or multiple children, with/without older children. The registration data used was derived from the 2015 general population census conducted by INSEE. The questions concerned the parents' level of dietary knowledge regarding children aged 0–3 years, their information sources, and how they would usually search for information on complementary feeding. The level of trust parents accorded to different information sources, along with the potential influence of these on parents' decisions, were assessed using Likert scales (4 points and 10 points, respectively). Finally, questions aimed at identifying the parents' expectations in terms of content and format were included.

Of the 1000 respondents, 175 parents reported that their youngest child currently or previously had a health problem that could significantly affect their diet. During data processing, the decision was made to exclude them from the analysis. The results presented in this report therefore concern 826 parents whose youngest child did not have this type of health problem.

In Study 2, paediatricians who are members of the French Association of Outpatient Paediatrics (*Association française de pédiatrie ambulatoire*, AFPA) (n = 1402) were questioned in October 2019 about their attitudes and practices when advising parents on complementary feeding. Data was collected online. The questionnaires were completed anonymously and participation was voluntary. Responses were obtained from 301 paediatricians.

Study 3 was conducted with the support of the agency Panelabs (MIS Group), working on behalf of the CSGA. It included 452 parents of at least one child under the age of 4 years who were recruited by applying the same variables and quota method as those used in Study 1. The parents completed an online questionnaire (T0) of 30 items concerning child nutrition, grouped into the following six topics:

- 1. Breastfeeding, milk-based diet (4 questions) 1–4
- 2. Age and methods of introduction (food groups, textures) (3 questions) 5–7
- 3. Strategies (e.g., repeated exposure) (4 questions) 8-11
- 4. How to feed a child to promote the development of healthy eating habits (parent behaviour, environment) (6 questions) 12–17
- 5. Food choices (9 questions) 18-26
- 6. Signs of hunger and fullness in children/child behaviour (4 questions) 27–30

For each item, parents had to indicate whether the content seemed true or false and to what extent they were certain of their response (4-point scale). They were then given the brochure to read, and the same parents completed the same questionnaire 3 weeks later (T1). The study took place between November 2020 and January 2021. Accuracy (number of correct responses) and certainty (number of proficient responses: accurate responses given with the maximum level of certainty) were compared at T1 vs T0 using Student's paired t-test. In order to test whether age, number of children or level of education had an impact on the change in knowledge, linear models were used.

For the qualitative study, a mixed system was set up by Kantar Public group. It consisted of:

- Eight group meetings of four to five participants, each lasting 3 hours. These meetings allowed for a comparison of views and identified converging expectations and areas for improvement. The aim of these meetings was to get people to react to different messages and media, and to assess their level of understanding and support.
- Fifteen individual interviews lasting 1.5 hours to further explore points of understanding or misunderstanding in the messages and any barriers to applying the recommendations.

Prior to the interviews and group meetings, the draft version of the brochure and of the food introduction table had been sent to the participants. They had to familiarise themselves with them and annotate them before the interview (what they learned, understood, did not understand, appreciated, did not appreciate, etc.).

Given the restrictions imposed by the COVID-19 health crisis, group meetings took place online via Zoom, and the interviews took place by telephone or videoconferencing; these meetings and interviews were conducted from 3 to 13 November 2020.

All of the respondents were parents of children aged 2 months to 3 years.

The sample of these parents included fathers and mothers, and was structured to take several variables into account, including socioeconomic category, level of education, place of residence, whether a parent to one or multiple children, and the age and sex of the children (see appendix for detail).

Results

Studies 1 and 2

Sources of information on complementary feeding Healthcare professionals proved to be the main source of information for 81% of parents (regardless of education level) and had the most influence on complementary feeding (7.7 ± 1.7/10). This level of influence was higher among the most educated and those who considered themselves to be in a good financial position. The healthcare professionals mentioned were mainly general practitioners and paediatricians (47% of parents) (De Rosso et al, 2022a). The paediatrician study showed that these professionals are aware of their responsibility to advise parents about complementary feeding; in fact, 93% recognised the need to discuss it with parents to help them adopt healthy feeding practices for their children (De Rosso et al, 2021).

The Internet (websites, blogs, social networks, smartphone apps) was the second source of information for 72% of parents. However, it had a lesser influence (5.6 ± 2.1). The parental network (friends, family) was a source of information for 63% of parents (especially for the least educated) with a fairly high level of influence (6.9 ± 1.8) especially among the most educated. As for printed resources (books, print media), they were a source of information for 44% of parents with a slightly lesser influence (6.2 ± 1.8), although higher among the most educated. Finally, TV and radio were only a source of information for 24% of parents (especially for the least educated) with a level of influence similar to that of the Internet (5.8 ± 2) (De Rosso et al, 2022a).

When asked to select their preferred media for complementary feeding information, a smartphone app was chosen by 43% of parents¹, a printed brochure by 42% (47% of parents of children aged 6-11 months) and websites by 38%.

¹ This type of tool was created by the CSGA with the support of Santé publique France.

According to paediatricians, the most effective tools to attract parents' attention were websites (73% of respondents), brochures (59%) and smartphone apps (57%).

Only 13% of paediatricians thought that parents used their personal networks for advice, underestimating the use of this information source.

Perceptions of complementary feeding

Complementary feeding was a source of concern for 30% of parents, especially those with only one child (40% vs 25% with multiple children; p < 0.001) and 31% of parents found the information and advice on this topic to be contradictory (De Rosso et al, 2022a).

Study 3

Change in indicators

A total of 452 parents responded to both stages of the study (T0 and T1) and their responses were therefore included in the analysis. The analysis found that between T0 and T1 the number of accurate responses (median 22 to 25, p = 0.001) and proficient responses (median 11 to 17, p < 0.001) increased significantly. The median difference between T1 and T0 was greater for proficient responses than for accurate responses, meaning that reading the brochure increased parents' knowledge, while improving their confidence in the responses they gave to an even greater extent.

The information that was least well known, for which the level of certainty still remained relatively low, was whether it is possible to introduce all food groups between 4 and 6 months. This result may mean that the communication and distribution of this information needs to be pushed a little harder than the other information but also that it must be accompanied by practical advice in order to be better understood and accepted.

Analyses by parental characteristics

The change in knowledge was independent of age, number of children and educational level of the parents. However, at T0, less educated parents were less confident about their knowledge, which was in fact as accurate as that of the more educated parents.

In conclusion, reading the brochure meant that parents improved the accuracy of their knowledge on various aspects of complementary feeding and their certainty improved further still, even for younger or less educated parents (De Rosso *et al*, 2022b).

Qualitative study (4th study)

The results of this study presented below mainly relate to information that parents considered new and/or that provoked the most reactions.

Dietary recommendations

Parents were relatively comfortable with the recommended age for starting complementary feeding (between 4 and 6 months) because it reflected their own practices: they remembered starting complementary feeding when their child was around 5–6 months old. However, for some women who breastfed, 4 months seemed too early and inconsistent with the WHO recommendation, which they quoted spontaneously (exclusive breastfeeding until the age of 6 months).

In contrast, advice regarding the possible introduction of all food types between 4 and 6 months was difficult to accept, with parents mainly concerned about allergic reactions (particularly for nuts) or digestive problems (caused by pulses or wholegrain products). As a result, the sentence "Introducing all foods, including those known to be allergens, from the beginning of

complementary feeding improves tolerance" (i.e., reduces the risk of food allergies) was misinterpreted. For parents, the only aspect of complementary feeding relevant to allergies concerned their identification through the introduction of different foods one by one. Consequently, this new information required clearer wording.

The list of excluded foods (unpasteurised milk and dairy products, honey) was a new discovery or even a shock for most parents because they were unaware of the risks, particularly the microbiological risks. As for the advice to add fats to homemade baby food or shop-bought jars that do not contain it, this was one of the most important items of information for parents in the test document. Parents believed that, as with their own diets, fats should be restricted in child's diet in the same manner as sugar and salt are. Some parents feared that fats would cause their child to gain excess weight. These different reactions show that it is useful to explain the need for sufficient fat intake during complementary feeding.

Another issue explored was that of homemade baby foods versus shop-bought jars or other processed products (rusks, etc.). Parents unanimously considered that the test-document's recommendation to favour homemade food was legitimate. However, some parents found the initial text to be stigmatising because it seemed difficult to avoid using shop-bought jars (lack of time or lack of confidence in cooking skills).

Parents particularly appreciated the advice on the gradual introduction of different textures. They did not have any particular difficulty in understanding the information provided in the draft brochure, but expressed the need for illustrations and tips to present the different textures properly. In this respect, the test-video showing ways to prepare different food textures was deemed useful.

Two other aspects of the test document caught the attention of the parents interviewed. The first concerned the possibility to alternate UHT whole cow's milk and toddler formula milk from the age of 1 year, whereas previous advice favoured the use of toddler formula milk only. The second concerned the possibility to give "standard" dairy products instead of the more expensive products labelled "for babies".

Parents interviewed found that the advice about alternating cow's milk/toddler formula contradicted what was still widely recommended by their paediatricians and doctors. However, the explanations provided in the supporting document were deemed compelling; above all, they saw the financial factor as an advantage to alternating (as toddler formula and "baby" dairy products are more expensive).

The foods recommended for snacks also produced strong reactions because parents considered them too much like "health food". The pre-test confirmed that most parents regard children's snack time as a moment of "pleasure", surrounded by social norms and therefore very difficult to dictate. Yet this time of day (alongside breakfast) contributes the greatest sugar intake in children, mainly through the consumption of pastries, biscuits and cakes (ANSES, 2017). The recommendation to avoid sugary products and pastries at snack time generated a feeling of guilt. The final brochure featured revised wording in order to influence the foods chosen for snacks without being too restrictive.

Educational Strategies

Educational advice surrounding diet (trusting the child's appetite, repeatedly offering foods initially rejected, etc.) as well as advice on the mealtime environment, including the issue of screens during meals, was noticed and considered helpful, but it also unsettled some parents. In fact, unlike advice related strictly to diet, educational advice was judged more intrusive in nature, causing some parents to distance themselves from it. Some parents found certain advice seemed hard to put into practice, such as not forcing the child to eat or finish everything

on their plate. These parents worried that their child would not eat enough, or thought that forcing children to eat is part of teaching obedience and discouraging "fussy" eating.

Young children's exposure to screens is also a very delicate subject due to their omnipresence in the daily environment of adults. Some parents can also consider screens as a "moment of peace". In addition, parents minimised the eventually harmful effect of television during meals by stating that their child sits with their back to the screen – and is therefore not exposed – without realising that this reduces their interaction with their child during meals since they themselves watch TV.

Baby-led weaning (BLW) was also discussed during meetings and interviews. This subject was either raised spontaneously by the parents or consciously by the facilitator. BLW seems to be increasingly high-profile and this study presented an opportunity to test its reputation and attitudes towards it. A significant number of mothers had heard of BLW (on either the Internet or television, particularly via the talk show *La Maison des Maternelles*). Some seemed attracted to this approach because it represented a genuine educational step (time for supported exploration, promoting independence, etc.). However, among those who knew about BLW, none had taken the plunge, as this method raised some questions and especially fears (choking in particular). These results showed that the principle of BLW needed explaining in the brochure, but without making a statement on its value before possessing sufficient information from the literature (Nicklaus et al, 2020; D'Auria et al, 2018).

Tone/Register of the brochure

Overall, the content of the planned brochure was deemed particularly comprehensive and useful by the parents interviewed; the tone used was perceived as "caring". Some parents indicated that they would like to have had this type of document when they started complementary feeding with their child. In addition, the brochure encourages parents to ask questions about their practices and to discuss them with a healthcare professional. As in Study 1, this study also found that the most trusted source of information for parents is healthcare professionals; they play an important advisory role on the subject of complementary feeding and are essential contacts for relaying the new recommendations and the brochure from Santé publique France.

Final step

The results of studies 3 and 4 were taken into account to finalise the wording of the dietary recommendations and educational advice for parents, as well as the graphic design of the resources tested (brochure, poster, videos).

RESULTS

Recommendations

All the recommendations for parents are included in the brochure and summarised in a quick reference poster (see resources and download links p. 21).

These recommendations are summarised in a document for healthcare and early childhood professionals:

Essential points:

- All food groups, including foods known to be allergens, can be introduced from the start of complementary feeding, i.e., between 4 and 6 months.
 - ✓ It is no longer recommended that the introduction of the most allergenic foods (gluten, eggs, peanuts and dairy products) should be delayed, even in children at risk of allergy.
 - ✓ All food groups, including pulses, wholegrain products (wholegrain bread or cereal, wholegrain pasta/couscous, etc.) should be introduced depending on the child's ability to digest them. This means the child will get used to foods that are high in fibre very early.
 - ✓ There is no particular order in which to introduce different food groups.
- Always add fats (alternate rapeseed oil, nut oils, olive oils or occasionally a little butter) to home-made or shop-bought baby foods that do not contain them. This is because the average fat intake of children under 3 years of age is insufficient.
- Introduce new textures from 6–8 months (around 2 months after starting complementary feeding): gradually switch from purées or smooth compotes to crushed foods, then to small soft pieces, then crunchy foods. This stimulates the child's process of learning to chew, encouraging their acceptance of solid foods later.
- From the age of 1 year, parents can alternate toddler formula milk with <u>UHT whole</u> cow's milk to ease pressure on their budget.
- Wait as long as possible before introducing sugary foods, then only in very small amounts.
 - ✓ Introducing foods high in sugar such as confectionery, sugary drinks and cakes now features early in complementary feeding and this seems to be incompatible with forming healthy eating habits.
 - Sugary and/or fatty processed foods largely dominate afternoon snack in France. It is strongly recommended to raise awareness among parents about the importance of offering children snacks with real nutritional value.

Reminder of risks of infection

Reminding parents to avoid certain foods due to the risk of infection is also important, as they are not always aware of this:

- No raw milk or cheese made from raw milk before the age of 5 years.
- No raw or lightly cooked meat, fish or shellfish; no raw eggs or dishes using raw eggs (homemade chocolate mousse or mayonnaise) before the age of 3 years.
- No honey before the age of 1 year.

Soy-based products are not recommended for children under 3 years of age due to their isoflavone content (suspected to be an endocrine disruptor).

Educational advice

- Importance of parent/child interaction during meals.

 Given current habits of screen usage, it is important to remind parents that at mealtimes, as at many other times, children need their parent's full attention. This means it is preferable to switch off the TV and put phones aside. As a result, the child will be less distracted and feel better when he/she is full.
- Support the child by allowing them to experiment at their own pace.
- Offer without forcing. Often you need to offer a food several times (up to 10) before it is accepted.
- Trust the child's appetite: the parent knows what to give and when, the child knows how much.
- Look out for the child's signs of hunger and fullness.
- If possible, opt for homemade.
- Reassure parents during the phase when children are afraid of trying new foods.
- Explore food together, e.g. cooking with the child.

COMPLEMENTARY FEEDING FOR CHILDREN UP TO 3 YEARS OLD

		TIPS	BIRTH TO 4 MONTHS	4 TO 6 MONTHS
			Only give your child milk	- Start complementary feeding - Offer all food groups in smooth purées - If there are allergies in your family, speak to your doctor before starting
200	Breast-milk and/or infant formula		Breast milk or infant formula (first milk)	Breast milk or transition from first infant milk to follow-on infant milk
mount 1	Dairy products: yoghurt, <i>fromage</i> blanc/cottage cheese, cheese	Alternate Plain, not flavoured No raw milk or cheese made from raw milk (risk of infection) except Emmenthal and Comté cheese Fat free, skimmed and semi-skimmed products not suitable for infants under 3	No	Examples: - A few teaspoons of yoghurt at snack time - Occasionally melt a bit of grated cheese into a purée
10 miles	ruit and vegetables: Il types	- Try to choose seasonal varieties and local products - Organic if possible	No	Every day A few teaspoons, then gradually increase depending on the child's appetite Well-cooked and smoothly blended vegetables Well-cooked fruits blended into smooth purée with no added sugar
	Pulses: lentils, dried beans, chickpeas, etc.	- Organic if possible - Offer depending on how well your child digests them	No	Occasionally 1 teaspoon Well-cooked and mixed to a smooth purée
W.	Potatoes and other starchy foods: pasta, rice, bread, couscous, including wholegrain/brown/ wholemeal varieties	- Organic if possible - Wholegrain cereals: offer depending on how well your child digests them	No	- Gluten can be introduced even for children at risk of allergies - Always mixed with vegetables: ¼ starchy foods with ¾ vegetables blended into a smooth purée
	Poultry, other meats, fish and eggs	Always well cooked Poultry is preferable Fish: twice a week, including one oily fish (e.g. sardines, mackerel, salmon) No raw shellfish or any dishes made with raw eggs	No	- From time to time and then more regularly - 5g a day = 1 teaspoon blended meat/fish or crushed hard-boiled egg
<u> </u>	Added fats: oil (rapeseed, nut, olive), butter	Add raw fat to homemade or shop-bought baby food if it doesn't contain any Oils are preferable; vary the type used	No	Per day: 1 teaspoon of oil or occasionally 1 pea-sized amount of butter
Cima .	Drinks	The only recommended drink is water	Offer water if the weather is very hot, or in case of fever, vomiting or diarrhoea	As much water as the child wants, served in a cup Avoid all sugary drinks, including all types of fruit juice, all fizzy drinks and syrups
	Processed meat	Apart from cooked ham, processed meat (sausages, paté, etc.) should only be given very occasionally	No	Cooked ham possible from time to time, mashed up smoothly: 1 teaspoon
s s	ialt and salted products	To be limited	No	Do not add salt to homemade baby food or shop-bought jars Do not give baby salted foods (crisps, etc.)
	Sugary foods: chocolate, confectionery, cakes, cream desserts, ice-creams, ketchup, etc.	- To be limited - Delay introducing for as long as possible	No	No honey before the age of 1 year (risk of infection)

As baby grows, turn the poster over



COMPLEMENTARY FEEDING FOR CHILDREN UP TO 3 YEARS OLD

		TIPS	FROM 6/8 MONTHS	1 TO 3 YEARS
			Gradually introduce all textures: from smooth blended foods to minced and ground foods, moving on to small, soft pieces	Provide a varied and balanced diet similar to the recommendations for adults, in quantities suitable for the child's age Continue giving milk
	Breast-milk and/or infant formula		Breast milk and/or Follow-on infant milk: 500ml/day	Breast milk or "toddler milk" or alternate "toddler milk" with UHT whole cow's milk: 500 ml/day (without exceeding 800ml of milk + dairy products per day)
É	Dairy products: yoghurt, fromage blanc/cottage cheese, cheese	- Alternate - Plain, not flavoured - No raw milk or cheese made from raw milk (risk of infection) except Emmenthal and Comté cheese - Fat-free, skimmed and semi-skimmed products not suitable for infants under 3	- From 8/10 months: small pieces of soft cheese - 10 months onwards: small pieces of gradually harder cheeses	- 150 to 200 ml of milk = one yoghurt = 20g of cheese - All textures
-	Fruit and vegetables: all types	Try to choose seasonal varieties and local products Organic if possible	- At each meal and depending on your child's appetite - Well-cooked vegetables - Very ripe or cooked fruit	At each meal and depending on your child's appetite Raw and cooked, all textures, including pieces to chew
Ī.	Pulses: lentils, dried beans, chickpeas, etc.	- Organic if possible - Offer depending on how well your child digests them	Approximately once a week A few teaspoons Mash with a fork Gradually, pulses can be given without mashing but well-cooked and soft	- At least twice a week - All textures
THE PARTY NAMED IN	Potatoes and other starchy foods: pasta, rice, bread, couscous, including wholegrain/brown/ wholemeal varieties	Organic if possible Wholegrain cereals: offer depending on how well your child digests them	Always serve with vegetables: half starchy foods/half vegetables Rice, couscous, larger types of pasta, bread; potatoes in small, soft pieces	- Every day - All textures - 3–4 tablespoons per day
(1)	Poultry, other meats, fish and eggs	- Always well cooked - Poultry is preferable - Fish: twice a week, including one oily fish (e.g. sardines, mackerel, salmon) - No raw shellfish or any dishes made with raw eggs	10g/day = 2 teaspoons Or ¼ of a hard-boiled egg	Minced, crushed, then gradually in larger pieces - 1–2 years old: 20 g/day = 4 teaspoons or 1/3 of a hard-boiled egg 2–3 years: 30 g/day = 6 teaspoons or ½ a hard-boiled egg
	Added fats: Oil (rapeseed, nut, olive), butter	Add raw to homemade or shop-bought food if it doesn't contain any Oils are preferable; vary the types used	Per day: 1 teaspoon of oil or occasionally 2 pea-sized amounts of butter	Per day: 2 teaspoons of oil or occasionally 2 pea-sized amounts of butter
Cucras	Drinks	The only recommended drink is water	 As much water as your child wants, served in a cup Avoid all sugary drinks, including all types of fruit juice, fizzy drinks and syrups No "light/diet/zero" drinks, coffee, caffeinated fizzy drinks or "energy" drinks 	
	Processed meat	Apart from cooked ham, processed meat (sausages, paté, etc.) should only be given very occasionally	Cooked ham can be given to baby occasionally, first mashed and later in small pieces: 2 teaspoons	Cooked ham can be offered occasionally 1–2 years: 4 teaspoons 2–3 years: 6 teaspoons
i	Salt and salted products	To be limited	Do not add salt to homemade food or shop-bought jars Do not give your child salted foods (crisps, etc.)	Do not add salt to shop-bought products Any salted products consumed should be in very small amounts (snack products, etc.)
No.	Sugary foods: chocolate, confectionery, cakes, cream desserts, ice-creams, ketchup, etc.	- To be limited - Delay introducing for as long as possible	No honey before the age of 1 year (risk of infection)	Note: breakfast cereals are usually high in sugar





Information and communication resources



A5 brochure, 36 pages: "Step by step, your child learns to eat like a grown-up. The little guide to complementary feeding"

DT05-280-21B Pas à pas, votre enfant mange comme un grand. (mangerbouger.fr)

A3 double-sided quick reference poster: Complementary feeding for children up to age 3 (mangerbouger.fr):

https://www.santepubliquefrance.fr/determinants-de-sante/nutrition-et-activite-physique/documents/brochure/pas-a-pas-votre-enfant-mange-comme-un-grand

4 videos "Learn, test and adapt": Complementary feeding: learn, test and adapt - YouTube

6 tutorial videos: Tutorials for complementary feeding of children under the age of 3 - YouTube

- 1. What are the good habits for giving my baby food?
- 2. Should I let my child play with food?
- 3. How do I know if my baby has eaten enough?
- 4. What if my baby refuses to eat a food?
- 5. Is my baby ready to eat new textures?
- 6. How does my baby move on from smooth purées to small pieces of food?

Website mangerbouger.fr, area dedicated to complementary feeding:

https://www.mangerbouger.fr/manger-mieux/a-tout-age-et-a-chaque-etape-de-la-vie/jeunes-enfants-de-0-a-3-ans-du-lait-a-la-diversification/tout-savoir-sur-la-diversification-alimentaire-de-votre-bebe

Document for healthcare and early childhood professionals: "New dietary recommendations for children under three years of age: the essentials"

https://www.mangerbouger.fr/content/show/1593/file/1DDK007 210x297 MASTER DA SP F E1%20%28002%29-DEF.pdf



Fraternité



Nouvelles
recommandations
pour la diversification
alimentaire des enfants
de moins de 3 ans :
L'ESSENTIEL

Les connaissances scientifiques évoluant, Santé publique France a élaboré les nouvelles recommandations alimentaires pour les moins de 3 ans. Fondées sur les récents avis de l'Anses et du HCSP, elles ont été mises au point avec l'appui de professionnels de santé et de la petite enfance et ont fait l'objet de plusieurs études auprès de parents et de professionnels de santé.

Etant au plus proche des familles dans la période de diversification alimentaire qui peut susciter beaucoup de questions, vous êtes un interlocuteur privilégié pour relayer ces recommandations auprès des parents et adapter les conseils à chaque enfant, chaque situation.

PRINCIPALE NOUVEAUTÉ

Possibilité d'introduire tous les groupes d'aliments, y compris les aliments réputés allergènes, dès le début de la diversification c'est-à-dire entre 4 et 6 mois.

- Il n'est plus recommandé de retarder l'introduction d'aliments comme le gluten, l'œuf, les arachides, les produits laitiers, même chez l'enfant à risque d'allergie.⁽¹⁾
- Tous les groupes d'aliments, ce sont aussi les légumes secs, les produits céréaliers complets (pain complet ou aux céréales, pâtes, semoule, riz complets), à introduire en fonction des capacités digestives de l'enfant. L'enfant s'habituera ainsi très tôt à consommer des aliments riches en fibres.
- L'introduction des différents groupes alimentaires peut se faire sans respecter un ordre particulier.

AUTRES NOUVEAUTÉS

 Ajouter systématiquement des matières grasses (alterner huiles de colza, de noix, d'olive ou de temps en temps un peu de beurre) dans les préparations maison ou dans celles du commerce qui n'en contiennent pas. En effet, les apports en lipides des enfants de moins de 3 ans sont en moyenne insuffisants.⁽¹⁾

- Introduire de nouvelles textures à partir de 6-8 mois (environ 2 mois après le début de la diversification): passer progressivement des purées ou compotes lisses aux aliments écrasés, puis aux petits morceaux mous puis à croquer. Cela stimule l'apprentissage de la mastication et l'acceptation ultérieure des aliments solides.
- Dès un an, il est possible d'alterner lait de croissance et lait de vache entier UHT si la famille a des problèmes de budget.
- Introduire les produits sucrés à l'âge le plus tardif possible et de manière limitée.

Actuellement la consommation d'aliments riches en sucres – type confiserie, boissons sucrées, gâteaux... – apparaît tôt dans la diversification et semble difficilement compatible avec la mise en place d'habitudes alimentaires saines.⁽¹⁾

Le goûter est en France très largement composé d'aliments transformés sucrés et/ou gras.⁽²⁾ Il est fortement recommandé de sensibiliser les parents à l'importance de proposer à l'enfant des produits intéressants d'un point de vue nutritionnel au goûter. Il est également important de rappeler aux parents que certains aliments sont à proscrire en raison de risques infectieux, car ils n'en ont pas toujours conscience:

- Pas de lait cru ni de fromages au lait cru avant 5 ans.
- Pas de viande, poisson, coquillages crus ou peu cuits ni d'œufs crus ou de préparations à base d'œufs crus (mousse au chocolat ou mayonnaise maison) avant 3 ans.
- · Pas de miel avant 1 an.

Et qu'il est déconseillé de donner des produits à base de soja aux moins de 3 ans, en raison de leur teneur en isoflavones (rôle suspecté de perturbateur endocrinien).

L'importance de l'interaction parents/enfant au moment du repas

Concernant l'alimentation, quelques fondamentaux: proposer à l'enfant de manière répétée (jusqu'à 10 fois) les aliments qu'il n'apprécie pas tout de suite, faire confiance à son appétit et être attentif aux signes de rassasiement, ne pas le forcer à manger.

Compte tenu des pratiques actuelles en matière d'écrans, il est important de rappeler aux parents qu'au repas comme à beaucoup d'autres moments, l'enfant a besoin de toute leur attention. Il est donc préférable d'éteindre la télé et de laisser son téléphone à distance. De son côté, l'enfant sera moins distrait et sentira mieux quand il est rassasié.



Retrouvez toutes les recommandations détaillées dans *Pas à pas,* mon enfant mange comme un grand, le petit guide de la diversification alimentaire et d'autres outils sur mangerbouger.fr.

- (1) Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail https://www.anses.fr/fr/content/avis-de-lanses-relatif-%C3%A0-lactualisation-des-rep%C3%A8res-alimentaires-du-pnns-jeunes-enfants-0-3
- $(2) Haut \ conseil \ de \ sant\'e \ publique https://www.hcsp.fr/explore.cgi/avisrapportsdomaine?clefr=924$

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APPENDICES

1 / Composition of the Project Support Committee

Marylise Arizzoli, infant care specialist and nursery director

Céline Bluteau, infant care specialist, maternity and early childhood services

Gabrielle Frey, infant care specialist

Dr Maryse Bonnefoy, Doctor, maternity and early childhood services

Célia Calpas, paediatric dietician at Robert Debré University Hospital

Dr Annie Elbez, paediatrician

Dr Raphaël Lozat, general practitioner (Moissac)

Sofia de Rosso, PhD **student of public health** - Edulia project, Determinants of food behaviour during life, relationship to health, CSGA (Centre for Taste and Food Sciences Behavior), **INRAe**

Camille Schwartz, researcher, CSGA, INRAe

Dr Catherine Vanhauwaert, Doctor, maternity and early childhood services

Dr Arielle le Masne, Perinatal and Early Childhood Unit, **Department of Health Prevention** and **Promotion**, **Santé publique France**

Pauline Ducrot, Aurélie Nisand, Diet and Physical Activity Unit, **Department of Health Prevention and Promotion**, **Santé publique France**

Benoît Salanave, Cardiometabolic and Respiratory Unit, Non-communicable Diseases and Trauma Division, Santé publique France / Paris 13 University, Bobigny

Corinne Delamaire, Laurence Noirot, **Support Committee Coordinators**, Diet and Physical Activity Unit, **Department of Health Prevention and Promotion**, **Santé publique France**

2 / List of information resources analysed by the project support committee

Brochures

- Département de Vendée. L'alimentation de votre enfant de 4 mois à 3 ans. 2016. En ligne : http://www.vendee-enfance.fr/Dossiers/Guide-pour-l-Alimentation-de-votre-enfant-mardi-08-novembre-2016
- Agence régionale de santé et Structure régionale d'appui et d'expertise en nutrition des Pays de la Loire, Caisse d'allocations familiales et Conseil départemental (PMI) de Loire-Atlantique.
 À table tout le monde ! Alimentation et activité physique des enfants de 0 à 3 ans. Online : https://assmat.loire-atlantique.fr/jcms/classement-des-contenus/actualites/a-table-tout-le-monde-alimentation-et-activite-physique-des-enfants-de-0-a-3-ans-fr-p1 205859
- Les légumes et les fruits, aidez vos enfants à les aimer Un guide pour les parents de jeunes enfants. Habeat: https://www.habeat.eu/page0e89.html?a=parents
- Fondation Louis Bonduelle. *Comment faire aimer les légumes aux enfants*. Online : http://www.fondation-louisbonduelle.org/wp-content/uploads/2016/10/comment-faire-aimer-les-legumes-aux-enfants-dossier-fondation-louis-bonduelle-2010.pdf
- Office régional de la santé de Winnipeg *Nourrir votre bébé de 6 mois à 1 an*. Online: https://www.gov.mb.ca/healthychild/healthybaby/hb_solidfoods_fr.pdf
- Institut Danone pour la nutrition et la santé. *Le guide pratique pour les assistant-e-s maternel-le-s. L'alimentation des 0-3 ans.* Online: http://institutdanone.org/espace-pedagogique/professionnel-de-lenfance/alimentation/
- Institut national de santé publique du Québec *Guide pratique pour les mères et les pères. Mieux vivre avec notre enfant de la grossesse à deux ans.* Online: https://www.inspq.qc.ca/mieux-vivre/consultez-le%20guide
- Good food for babies Swedish Food Agency, 1 Brochure et 1 vidéo. https://www.livsmedelsverket.se/en/food-habits-health-and-environment/dietary-guidelines/babies-and-children/spadbarn/
- Brochure 5532 a day British Nutrition foundation https://www.nutrition.org.uk/healthyliving/toddlers/new5532.html
- Copin C. Mouterde O. *Conseils aux parents : alimentation de l'enfant de 4 mois à 3 ans*. Médecine et enfance. Novembre. 2014; 329-334.
- Mouterde O. Les temps de l'enfance. Médecine et enfance. 2009; 40 p.
- Comment introduire les premiers morceaux dans l'alimentation de mon enfant pour lui apprendre à bien mâcher. Petit guide (bien) pratique à l'usage des parents. INRA, CSGA. 2016. Non published
- Bien manger pour bien grandir Loire Atlantique (programme Malin)

 https://naitreetgrandir.com/fr/etape/0 12 mois/alimentation/fiche.aspx?doc=alimentation-autonome
- Naître et grandir Santé Québec https://naitreetgrandir.com/fr/etape/0_12_mois/alimentation/fiche.aspx?doc=alimentation-autonome
- Institut national de prévention et d'éducation pour la santé (Inpes). Guide nutrition des enfants et ados pour tous les parents, coll. La Santé vient en mangeant et en bougeant. Saint-Denis, 2004. Document épuisé.

Websites

Edumiam

https://www.edumiam.com/coach-virtuel

1000 premiers jours Site: https://www.first1000days.ie/blog-category/weaning/

Videos:

https://www.youtube.com/watch?v=OTjmKmTVF6U&index=1&t=0s&list=PLNEN4w93BoO3zAE0xAD Ce8ij03N7ewPel

https://www.youtube.com/watch?v=5SejsPywqN4&list=PLNEN4w93BoO3zAE0xADCe8ij03N7ewPel&i ndex=7

3/ Project support committee: resource evaluation grid



EVALUATION GRID

Objectives of Santé publique France's Project Support Committee: To formulate educational advice to be delivered to parents about complementary feeding for children up to 3 years of age

Title of resource: Type:
Printed resource (leaflet, brochure) □ Website □ Video □
Other (specify) Resource issued by: Rapporteur's name:
We will focus on the educational advice given to parents about how to feed their children. This questionnaire therefore only concerns this aspect; we exclude purely nutritional aspects (dietary guidelines/recommendations) in this first phase of our work. While dietary recommendations do of course need to feature in the resources, we do not analyse their scientific update here.
Stated recipient(s) (Parents, professionals in contact with children):
1. What do you think are the objectives of the resource? The resource aims to help the recipient to (several answers possible):
□ Gain knowledge □ Acquire skills □ Manage their emotions □ Other
2. Do you think the information provided in the resource is: □ Basically complete? □ Fairly incomplete?
State why
3. Is the information in this resource current? □ Yes, in the main □ No, not current enough.
State why:

4. Suitability of the resource

What comments would you make on the quality of the content and the resource, both positive and negative?

- Suitability of the choice of format, subject covered and stated objectives with regard to the recipients;
- Overall quality of animated images, illustrations,
- Quality of expression and writing

If the resource is a website:
- ease of browsing,
- logical organization (hierarchy of information, menus, search tools)?, Etc.
5. In your opinion, could anything be added to improve understanding (e.g. diagrams, illustrations), committing to memory (repetition, mnemonics, etc.), appropriation of content (various examples, scenarios, etc.)? □ Yes □ No
If yes, give details:
6. Is there a list of further resources for the user that allows them to find out more beyond what is featured in this format? $\ \ \square \text{Yes} \\ \ \ \square \text{No}$
Do you think this is useful?
□ Yes □ No
7. Do you think the reading level of the resource is appropriate for the recipients? From the point of view of the choice of vocabulary and tone: Yes No State why.
From the point of view of the illustrations used: ☐ Yes ☐ No State why
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From the point of view of the format chosen: ☐ Yes ☐ No State why
8. Would you agree that the initial knowledge and perceptions of the recipients are taken into account? □ Mostly agree □ Somewhat disagree
State why
9. To get the most out of the resource, do you think that support would be useful? □ Yes □ No
If yes, what type?
10. Other comments concerning the resource studied or suggestions concerning a resource to be developed by Santé publique France

4 / Structuring the sample (qualitative study)

The sample was structured by the following variables:

- Socio-economic category and educational level, in order to take into account the different perceptions of diet, dietary habits and information needs. We looked at lower socio-economic groups (employees and workers) with an educational level of baccalaureate or below and middle and upper socio-economic groups (intermediate and middle management).
- Place of residence, to ensure a geographically diverse sample including inhabitants of large urban areas (e.g., Paris, Lyon, Marseilles), large or medium cities (e.g., Dijon, Rennes, Lille) and small towns or rural areas (e.g., Niort, Saumur, Valence).
- Parents to one or multiple children: because new parents have different perceived levels of information or concerns than parents of multiple children, two small focus groups (5 participants) with only parents of one child and two small groups with only parents of multiple children were set up so that their specific requests or needs could be identified.

The following were also taken into account in recruitment to ensure a diverse sample:

- Whether or not the child was breastfed.
- Family structure, by including a few mothers or fathers of single-parent families.
- Type of childcare under one year of age.

Within the small groups, the following were also taken into account in recruitment:

- The sex of the parents: with a minimum of two fathers per focus group, reporting an interest in their child's diet.
- Child's sex: balance between boys and girls within each group.
- Child's age (or age of the youngest child for multiple-child families): within each group two thirds were between 4 and 18 months, the other third between 18 months and 3 years.

The following were excluded:

- Parents of children who had a current or previous health problem that severely affected their diet.
- Parents working (or whose spouse was working) in the fields of health, nutrition or diet.