



## EDITORIAL

## Methods of introduction of complementary feeding in the first year of life



## Métodos de introducción de alimentación complementaria en el primer año de vida

Cristina Campoy<sup>a,b,c,d</sup>, Rosaura Leis<sup>e,f,g,h,\*</sup>, Comité de Nutrición y Lactancia Materna de la Asociación Española de Pediatría

<sup>a</sup> Departamento de Pediatría, Facultad de Medicina, Universidad de Granada, Granada, Spain

<sup>b</sup> Centro de Excelencia de Investigación Pediátrica EURISTIKOS, Universidad de Granada, Granada, Spain

<sup>c</sup> Instituto Biosanitario de Granada (Ibs-Granada), Granada, Spain

<sup>d</sup> CIBERESP, Instituto Carlos III, Madrid, Spain

<sup>e</sup> Unidad de Gastroenterología, Hepatología y Nutrición Pediátrica, Hospital Clínico Universitario de Santiago, Santiago de Compostela, A Coruña, Spain

<sup>f</sup> Grupo Nutrición Pediátrica, Instituto de Investigación Sanitaria de Santiago (IDIS), Santiago de Compostela, A Coruña, Spain

<sup>g</sup> CIBEROBn, Instituto Carlos III, Madrid, Spain

<sup>h</sup> Universidad de Santiago de Compostela, Santiago de Compostela, A Coruña, Spain

Complementary Feeding (CF) is an important stage in the transition from milk feeding (breastfeeding or infant formula) to family foods, when healthy eating habits are acquired, taking place during a critical period of growth and development, becoming a target timing of life for preventive strategies.<sup>1</sup> There is an increasing interest about *when, what and how* CF should be introduced, because healthy feeding practices during this period may have positive short- and long-term effects on growth, body composition, neurodevelopment, healthy food preferences, or gut microbiota composition and function. Adequate and healthy CF may also diminish the risk of infections, allergies, type 1 diabetes mellitus, as well as celiac and other non-communicable

diseases.<sup>2</sup> Therefore, CF should meet infant's nutritional requirements, avoiding nutritional deficiencies or nonoptimal introduction of certain types of foods, because of their subsequent negative effects on early and later health.

To establish the specific timing for introducing CF, infant's nutritional needs, degree of psychomotor, gastrointestinal and renal development must be taken into account. In any case, the introduction of CF should not be made before 17 weeks of age, as recommended by the Committee of Nutrition of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN).<sup>3</sup>

It is evident that parents play a major role during the CF process, making decisions on the timing, content of the diet, and the way in which the infant is fed, setting rules and expectations, and providing a role model, influencing in the development of food and dietary preferences and appetite regulation.<sup>1–3</sup> Parents should, however, be encouraged to adopt a responsive style of parenting and understand how to recognize their infant's hunger and satiety cues. Feeding to comfort or as a reward should be discouraged.

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\* Corresponding author.

E-mail addresses: [maria.rosaura.leis@usc.es](mailto:maria.rosaura.leis@usc.es), [maria.rosaura.leis.trabazo@sergas.es](mailto:maria.rosaura.leis.trabazo@sergas.es) (R. Leis).

The nutritional committees of the main Pediatric Societies support that there is not enough evidence to determine which is the best method of weaning: either the traditional introduction of grinded or mashed food using a spoon given by parents (called traditional spoon-feeding or standard weaning), or the increasingly popular “*Baby-Led Weaning*” (BLW). BLW is a method of weaning, in which a variety of whole foods, textures and consistencies are presented to the infant, progressively sharing family foods, self-select them and self-feed. Alongside recommendations to delay the introduction of solid foods until 6 months, there has, however, been an increasing tendency to avoid the initial “puree” stage altogether and progress straight to finger foods. Prolonged use of pureed foods should be discouraged, and infants should be eating lumpy foods by 8–10 months at the latest. By 12 months, infants should drink mainly from a cup or training cup rather than a bottle. In fact, once the infant is physically ready to eat on its own.<sup>1–3</sup>

BLW may provide a range of benefits to the infants, including better infant autonomy and control over their intake, infant’s appetite control and lead to higher levels of satiety-responsiveness and better eating patterns. Healthy BLW may reduce the risk of overweight and obesity in later life. Nevertheless, recent studies show that the vomiting reflex, spitting food out of the mouth, and gagging, are more common among children fed by the BLW method<sup>4</sup>; but in contrast no differences in frequency of choking, body mass index and energy intake, between BLW and traditional feeding practices have been shown.<sup>5</sup>

A modified approach, the “*Baby-Led Introduction to Solids*” (BLISS), has been developed to address potential concerns with iron status, choking, and growth faltering; BLISS infants show some benefits in increasing the range of iron-rich foods consumed, less food fussiness and better enjoyment of food compared to infants who were spoon-fed, but it is not associated to a more appropriate body weight than the traditional feeding method.<sup>6</sup> These feeding methods are also tested in a recent and interesting randomized clinical trial by Oliveira et al.,<sup>7</sup> published in the present number of *An Esp Pediatr* 2023. A total of 135 infants were randomized to be fed CF by “*Parent-Led-Weaning*” (PLW), BLISS, or mixed method to assess the effects on constipation symptoms; the authors did not find any association between constipation symptoms and the feeding method of introduction of CF used. Other recent studies have demonstrated that infants fed by BLW have a higher consume of eggs,<sup>8</sup> less exposed to ultraprocessed foods and exposed later.<sup>9</sup>

Finally, given the self-selected nature of parents and infants who currently follow this practice, and the limited observational data available, it is not possible to draw conclusions to the best method for CF introduction.<sup>1–3</sup> However, there are new promising studies on-going which will support evidence to the most relevant outcomes, to be able to establish a most adequate recommendation regarding the best method for CF introduction.

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