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Improving the composition and marketing of commercial baby foods: a Nutrient Profile Model

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When, how and what to feed infants are complex and emotive questions. The early life period from conception until two years of age is a critical window during which the nutritional environment can influence development, and also risk of disease in later life⁽¹⁾. Breastfeeding for less than 6 months, which is common in Europe, has been linked to higher risk of childhood obesity.

A draft Nutrient Profile Model (NPM) to improve the quality of baby foods was developed following recommended World Health Organisation steps. Existing guidelines were identified; a rapid literature review of complementary feeding and marketing of baby food was undertaken to identify key issues; back-of-pack nutrition information and label data was reviewed for products marketed at children up to 36 months from Denmark, Spain, UK. Data were used to develop categories and thresholds for a provisional NPM.

This was adapted following feedback and tested with between 99–200 products from 7 European countries (Italy, Malta, Hungary, Norway, Portugal, Estonia and Slovenia) and adapted after reviewing summary results and following feedback⁽²⁾.

The NPM was developed with requirements for sugars, sodium, fats, protein and energy density. Labelling and marketing requirements were developed, including age of introduction of product, product name and claims. 2634 baby foods from 10 countries were summarised using the model. These were 768 from the UK, >200 each from Denmark (319), Spain (241), Italy (430) and Malta (243) and between 99–200 from Hungary, Norway, Portugal, Estonia and Slovenia. On average approximately a third of energy in baby foods examined from these European countries came from total sugar, and for most food categories energy from sugar was higher than 10%. Use of added sugars was widespread across product categories, with concentrated fruit juice most commonly used. However, by country between 16–39% of purees had very low energy density (<60kcal/ 100g) and 8–28% of products had higher sodium content than proposed thresholds. Between 10–50% of products from the 7 test countries were promoted as suitable for under 6 months.

An interactive website <https://babyfoodnpm.org/> to allow product testing for nutrition and marketing is now available.

Clear proposals for improving nutrient composition of commercial baby foods were produced. These suggestions, relating to both content and labelling, should be used to update regulations and promote product reformulation.

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References

1. Langley-Evans S (2015) *J Hum Nutr* **28**, 1–14.
2. Hutchinson J, Rippin H, Threapleton D *et al.* (2020) *Matern Child Nutr*, e13020.