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Introduction of complementary foods to the infant diet within the first year of life: evaluation of general recommendations using Achievable Benchmarks of Care[®]

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The primary objective of the present study was to assess the effect of DHA and arachidonic acid (ARA) supplementation of infant formulas on the incidence of respiratory illnesses during the first year of life. Enrolment for this multicentre prospective open-label 12-month observational study was conducted from 2002 to 2003 and included 1392 children from 357 Spanish paediatricians (the GENERACIÓN Study Group). Infants were assigned in the proportion 4.4:1 to receive a formula supplemented with 3.2 g DHA and 6.4 g ARA/kg or a low or non-supplemented control formula. Eligible infants were healthy, born at a gestational age that exceeded 36 weeks and non-breast-fed. Infants were to visit the paediatrician at baseline and months 1, 3, 5, 7, 9, and 12. At each subsequent visit records were taken of: anthropometric measurements; month of introduction for gluten-free cereal, gluten, fruits, vegetables, meat, fish, egg yolk, whole egg, cow's milk and legumes; the occurrence of clinical symptoms associated with common ailments in infancy. Results of the main objective have been published elsewhere^(1,2), and showed a significantly lower incidence of bronchitis or bronchiolitis in DHA + ARA-fed children. The secondary objective was to determine the adherence to paediatricians' recommendations to guidelines^(3,4) on the introduction of complementary foods to the infant's diet. Achievable Benchmarks of Care (ABC)[®] ratios were also calculated to determine the standards of excellence attained by the 10% of top performers⁽⁵⁾ and identify areas for improving adherence to guidelines on the introduction of complementary foods⁽⁶⁾. The Table summarizes the findings from the study. Overall, the adherence was appropriate for most recommendations, but some recommendations need to be reinforced, such as the introduction of fruits, fish, cow's milk and legumes.

Recommendation	n	% Adherence	ABC [®] (%)
Cereal without gluten from 4 months of age	999	97.2	98.9
Cereal with gluten from 6 months of age	829	94.5	100
Fruits from 6 to 7 months of age	1001	16.1	30.3
Vegetables from 6 to 7 months of age	989	82.9	94.3
Meat from 6 to 7 months of age	974	92.4	100
Fish from 9 to 10 months of age	921	75.5	97.8
Egg yolk from 9 to 10 month of age	910	91.1	100
Whole egg from 12 months of age	790	84.4	100
Cow's milk from 12 months of age	530	55.5	79.4
Legumes from 12 months	679	59.6	83.1

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