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The evaluation of an FFQ to determine energy, macronutrient, calcium, iron and zinc intakes of infants aged 12 months

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The aim was to compare the energy and nutrient intakes from an FFQ, devised to assess the diets of infants aged 12 months with those from a 4 d weighed-diet diary (WD) completed for the same fifty infants.

Infants in the Southampton Women’s Survey⁽¹⁾ are visited within the period 2 weeks before and 3 weeks after their first birthdays. The frequency of consumption and amount consumed for milks and seventy-eight food items during the 4 weeks preceding the interview are recorded. A subsample of families completed a WD, in which all milks and foods consumed by the infant were recorded. Breast-milk intake was estimated using an algorithm⁽²⁾. The median intakes and interquartile ranges (IQR) for energy, macronutrients, Ca, Fe and Zn are reported, together with Spearman rank correlation coefficients (*r*) in the Table.

In the sub-sample of infants assessed by FFQ and WD 46% were girls. The FFQ produced higher median values for energy and all nutrients compared with the WD but the values for *r* indicated reasonable agreement in the ranking of infants’ intakes between methods. The greatest differences in intakes were for Fe and Zn, which were partly accounted for by the lower number of infants consuming an infant formula at the time of the WD.

	FFQ (n 50)		WD (n 50)		<i>r</i>
	Median	IQR	Median	IQR	
Energy (kJ)	4422	4044–5550	3771	3426–4315	0.46
Protein (g)	37.0	32.6–52.1	34.5	28.9–39.4	0.52
Fat (g)	42.4	38.3–52.6	36.6	33.8–46.3	0.36
Carbohydrate (g)	135	117–155	112	96–127	0.49
Ca (mg)	877	783–978	784	611–990	0.65
Fe (mg)	8.48	5.92–10.72	5.20	3.96–7.40	0.44
Zn (mg)	6.25	5.37–7.40	4.54	3.97–5.48	0.39

In population studies the FFQ provides useful information ranking the intakes of infants aged 12 months.

1. Inskip HM, Godfrey KM, Robinson SM, Law CM, Barker DJ & Cooper C (2006) *Int J Epidemiol* 35, 42–48.
2. Mills A & Tyler H (1992) *Food and Nutrient Intakes of British Infants Aged 6–12 Months. Appendix V*, p. 117. London: H. M. Stationery Office.